10/ 502,538

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NEWS 1		Web Page URLs for STN Seminar Schedule - N. America
NEWS 2		"Ask CAS" for self-help around the clock
NEWS 3	DEC 18	CA/CAplus pre-1967 chemical substance index entries enhanced with preparation role
NEWS 4	DEC 18	CA/CAplus patent kind codes updated
NEWS 5	DEC 18	MARPAT to CA/CAplus accession number crossover limit increased to 50,000
NEWS 6	DEC 18	MEDLINE updated in preparation for 2007 reload
NEWS 7	DEC 27	CA/CAplus enhanced with more pre-1907 records
NEWS 8	JAN 08	CHEMLIST enhanced with New Zealand Inventory of Chemicals
NEWS 9	JAN 16	CA/CAplus Company Name Thesaurus enhanced and reloaded
NEWS 10	JAN 16	IPC version 2007.01 thesaurus available on STN
NEWS 11	JAN 16	WPIDS/WPINDEX/WPIX enhanced with IPC 8 reclassification data
NEWS 12	JAN 22	CA/CAplus updated with revised CAS roles
NEWS 13	JAN 22	CA/CAplus enhanced with patent applications from India
NEWS 14	JAN 29	PHAR reloaded with new search and display fields
NEWS 15	JAN 29	CAS Registry Number crossover limit increased to 300,000 in multiple databases
NEWS 16	FEB 15	PATDPASPC enhanced with Drug Approval numbers
NEWS 17	FEB 15	RUSSIAPAT enhanced with pre-1994 records
NEWS 18	FEB 23	KOREAPAT enhanced with IPC 8 features and functionality
NEWS 19	FEB 26	MEDLINE reloaded with enhancements
NEWS 20	FEB 26	EMBASE enhanced with Clinical Trial Number field
NEWS 21	FEB 26	TOXCENTER enhanced with reloaded MEDLINE
NEWS 22	FEB 26	IFICDB/IFIPAT/IFIUDB reloaded with enhancements
NEWS 23	FEB 26	CAS Registry Number crossover limit increased from 10,000 to 300,000 in multiple databases
NEWS 24	MAR 15	WPIDS/WPIX enhanced with new FRAGHITSTR display format
NEWS 25	MAR 16	CASREACT coverage extended
NEWS 26	MAR 20	MARPAT now updated daily
NEWS 27	MAR 22	LWPI reloaded
NEWS 28	MAR 30	RDISCLOSURE reloaded with enhancements
NEWS 29	MAR 30	INPADOCDB will replace INPADOC on STN
NEWS 30	APR 02	JICST-EPLUS removed from database clusters and STN

NEWS EXPRESS NOVEMBER 10 CURRENT WINDOWS VERSION IS V8.01c, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 25 SEPTEMBER 2006.

NEWS HOURS	STN Operating Hours Plus Help Desk Availability
NEWS LOGIN	Welcome Banner and News Items
NEWS IPC8	For general information regarding STN implementation of IPC 8
NEWS X25	X.25 communication option no longer available

Enter NEWS followed by the item number or name to see news on that

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* * * * * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 14:05:42 ON 05 APR 2007

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 14:05:58 ON 05 APR 2007
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 4 APR 2007 HIGHEST RN 929190-51-2
DICTIONARY FILE UPDATES: 4 APR 2007 HIGHEST RN 929190-51-2

New CAS Information Use Policies, enter HELP USAGETERMS for details.

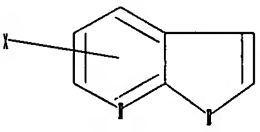
TSCA INFORMATION NOW CURRENT THROUGH December 2, 2006

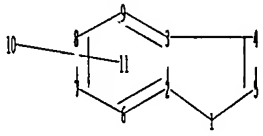
Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

=>
Uploading C:\Program Files\Stnexp\Queries\10502538a.str





chain nodes :
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ring nodes :
1 2 3 4 5 6 7 8 9
ring bonds :
1-2 1-5 2-3 2-6 3-4 3-9 4-5 6-7 7-8 8-9
exact/norm bonds :
1-2 1-5 3-4 4-5
normalized bonds :
2-3 2-6 3-9 6-7 7-8 8-9
isolated ring systems :

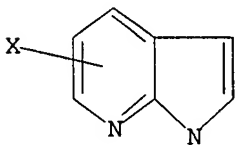
10/ 502,538

containing 1 :

Hydrogen count :
4:= exact 1 5:= exact 1
Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:CLASS
11:Atom

L1 STRUCTURE UPLOADED

=> d L1
L1 HAS NO ANSWERS
L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1 ful
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FULL SCREEN SEARCH COMPLETED - 135959 TO ITERATE

100.0% PROCESSED 135959 ITERATIONS 328 ANSWERS
SEARCH TIME: 00.00.01

L2 328 SEA SSS FUL L1

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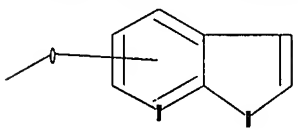

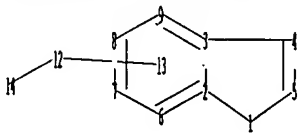

chain nodes :
12 14
ring nodes :
1 2 3 4 5 6 7 8 9
chain bonds :
12-14
ring bonds :
1-2 1-5 2-3 2-6 3-4 3-9 4-5 6-7 7-8 8-9
exact/norm bonds :
1-2 1-5 3-4 4-5 12-14
normalized bonds :
2-3 2-6 3-9 6-7 7-8 8-9
isolated ring systems :
containing 1 :

Hydrogen count :
4:= exact 1 5:= exact 1
Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 12:CLASS
13:CLASS 14:CLASS

L3 STRUCTURE UPLOADED

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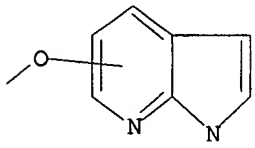
L3 HAS NO ANSWERS
L3 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l3 ful
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FULL SCREEN SEARCH COMPLETED - 135959 TO ITERATE

100.0% PROCESSED 135959 ITERATIONS 59 ANSWERS
SEARCH TIME: 00.00.01

L4 59 SEA SSS FUL L3

=> file hcaplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	344.20	344.41

FILE 'HCAPLUS' ENTERED AT 14:07:22 ON 05 APR 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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FILE COVERS 1907 - 5 Apr 2007 VOL 146 ISS 15
FILE LAST UPDATED: 4 Apr 2007 (20070404/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate

substance identification.

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=> d his

     (FILE 'HOME' ENTERED AT 14:05:42 ON 05 APR 2007)

     FILE 'REGISTRY' ENTERED AT 14:05:58 ON 05 APR 2007
L1             STRUCTURE UPLOADED
L2          328 S L1 FUL
L3             STRUCTURE UPLOADED
L4           59 S L3 FUL

     FILE 'HCAPLUS' ENTERED AT 14:07:22 ON 05 APR 2007

=> s l2/p
L5          94 L2/P

=> s l5 and (oxid?)/AB,BI
       1908185 (OXID?)/AB
       3027516 (OXID?)/BI
L6          24 L5 AND (OXID?)/AB,BI

=> d l6 1- ibib abs hitstr
YOU HAVE REQUESTED DATA FROM 24 ANSWERS - CONTINUE? Y/(N):y

L6   ANSWER 1 OF 24  HCAPLUS  COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:         2006:1280998  HCAPLUS
DOCUMENT NUMBER:          146:45393
TITLE:                    Preparation of 2-pyrrolidinone derivatives and their
                          use as anticonvulsants
INVENTOR(S):              Kenda, Benoit; Quesnel, Yannick; Ates, Ali; Michel,
                          Philippe; Turet, Laurent; Mercier, Joeel
PATENT ASSIGNEE(S):       Ucb S.A., Belg.
SOURCE:                   PCT Int. Appl., 270pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   2
PATENT INFORMATION:

     PATENT NO.           KIND   DATE        APPLICATION NO.          DATE
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     WO 2006128692         A2    20061207    WO 2006-EP5199           20060531
     WO 2006128692         A3    20070315
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR,
             KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX,
             MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE,
             SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,
             VN, YU, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
             CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
             GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM
PRIORITY APPLN. INFO.:                        EP 2005-11779        A  20050601
                                              EP 2005-11780        A  20050601
OTHER SOURCE(S):          MARPAT 146:45393
GI
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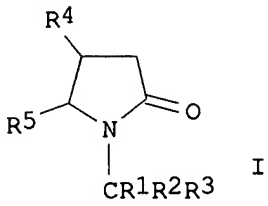


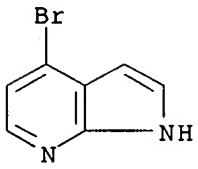
I

AB The present invention concerns 2-pyrrolidinone derivs. (shown as I; variables defined below; e.g. 1-[(5-nitro-1H-indol-3-yl)methyl]-4-propylpyrrolidin-2-one (1)), processes for preparing them, pharmaceutical compns. containing them and their use as anticonvulsants. For I: R1 is H, C1-12 alkyl, aryl or heterocyclyl; R2 is H; or R1 and R2 are linked together to form a C3-6 cycloalkyl; R3 is a (un)substituted heterocycle linked to the rest of the mol. via one of its C or N atoms; R4 is H, C1-12 alkyl ((un)substituted by halogen, C1-4 alkoxy, C1-4 alkylthio, azido, nitrooxy or aryl), C2-12 alkenyl, C2-12 alkynyl, aryl (non-substituted by a cycloalkoxy), azido, alkoxycarbonylamino, arylsulfonyloxy or heterocyclyl; R5 is H; alternatively R4 may form together with R5 and the 2-oxo-1-pyrrolidine ring a 1,3-dihydro-2H-indol-2-one ring; addnl. details and other Markush structures are given in the claims. Although the methods of preparation are not claimed, prepns. and/or characterization data for >300 examples of I are included. For example, 1 was prepared by hydroxymethylation of 4-propylpyrrolidin-2-one to give 1-(hydroxymethyl)-4-propylpyrrolidin-2-one (100 %), which was used to N-alkylate 5-nitro-1H-indole (44 %).

IT 348640-06-2P, 4-Bromo-1H-pyrrolo[2,3-b]pyridine
640735-24-6P, 4-Bromo-1-(triisopropylsilyl)-1H-pyrrolo[2,3-b]pyridine 858116-66-2P, 5-Bromo-1-(triisopropylsilyl)-1H-pyrrolo[2,3-b]pyridine
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of 2-pyrrolidinone derivs. and their use as anticonvulsants)

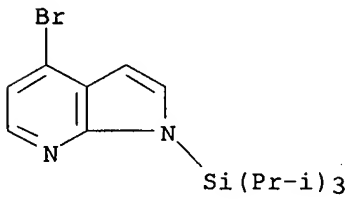
RN 348640-06-2 HCAPLUS

CN 1H-Pyrrolo[2,3-b]pyridine, 4-bromo- (CA INDEX NAME)

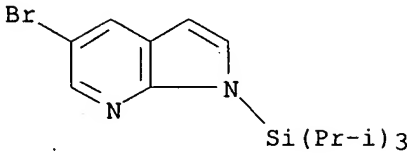


RN 640735-24-6 HCAPLUS

CN 1H-Pyrrolo[2,3-b]pyridine, 4-bromo-1-[tris(1-methylethyl)silyl]- (CA INDEX NAME)



RN 858116-66-2 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 5-bromo-1-[tris(1-methylethyl)silyl]- (CA INDEX NAME)



L6 ANSWER 2 OF 24 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:1279332 HCAPLUS
DOCUMENT NUMBER: 146:27722
TITLE: Preparation of 2-pyrrolidinone derivatives and their use as anticonvulsants
INVENTOR(S): Kenda, Benoit; Quesnel, Yannick; Ates, Ali; Michel, Philippe; Turet, Laurent; Mercier, Joeel
PATENT ASSIGNEE(S): Ucb S.A., Belg.
SOURCE: PCT Int. Appl., 258pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006128693	A2	20061207	WO 2006-EP5200	20060531
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RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				

PRIORITY APPLN. INFO.: EP 2005-11779 A 20050601
EP 2005-11780 A 20050601

OTHER SOURCE(S): MARPAT 146:27722
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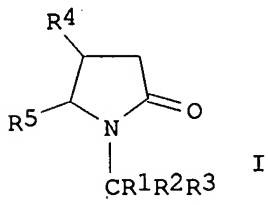


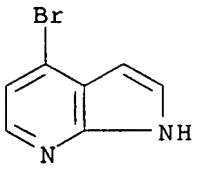
I

AB The present invention concerns 2-pyrrolidinone derivs. (shown as I;

variables defined below; e.g. 1-[(5-nitro-1H-indol-3-yl)methyl]-4-propylpyrrolidin-2-one (1)), processes for preparing them, pharmaceutical compns. containing them and their use as anticonvulsants. For I: R1 is H; R2 is H; R3 is a heterocycle linked to the rest of the mol. via one of its C or N atoms; R4 is C1-12 alkyl ((un)substituted by halogen or C1-4 alkoxy), C2-12 alkenyl, C2-12 alkynyl; R5 is H; alternatively R4 may form together with R5 and the 2-oxo-1-pyrrolidine ring a 1,3-dihydro-2H-indol-2-one ring; addnl. details and other Markush structures are given in the claims. Although the methods of preparation are not claimed, prepns. and/or characterization data for >300 examples of I are included. For example, 1 was prepared by hydroxymethylation of 4-propylpyrrolidin-2-one to give 1-(hydroxymethyl)-4-propylpyrrolidin-2-one (100 %), which was used to N-alkylate 5-nitro-1H-indole (44 %).

IT 348640-06-2P, 4-Bromo-1H-pyrrolo[2,3-b]pyridine
640735-24-6P, 4-Bromo-1-(triisopropylsilyl)-1H-pyrrolo[2,3-b]pyridine 858116-66-2P, 5-Bromo-1-(triisopropylsilyl)-1H-pyrrolo[2,3-b]pyridine
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of 2-pyrrolidinone derivs. and their use as anticonvulsants)

RN 348640-06-2 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 4-bromo- (CA INDEX NAME)



RN 640735-24-6 HCAPLUS
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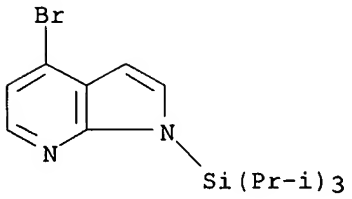

RN 858116-66-2 HCAPLUS
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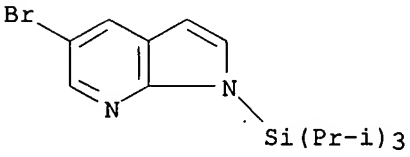

L6 ANSWER 3 OF 24 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:627604 HCAPLUS

DOCUMENT NUMBER: 145:83304
TITLE: Pyrrolo[2,3-b]pyridin-4-yl-amines and pyrrolo[2,3-b]pyrimidin-4-yl-amines as janus kinase inhibitors and their preparation, pharmaceutical compositions and use for treatment of diseases
INVENTOR(S): Rodgers, James D.; Wang, Heisheng; Combs, Andrew P.; Sparks, Richard B.
PATENT ASSIGNEE(S): Incyte Corporation, USA
SOURCE: PCT Int. Appl., 86 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2006069080	A2	20060629	WO 2005-US46207		20051221
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RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM					
US 2006183906	A1	20060817	US 2005-313394		20051221
PRIORITY APPLN. INFO.:			US 2004-638474P	P	20041222
			US 2005-726289P	P	20051013

OTHER SOURCE(S): MARPAT 145:83304
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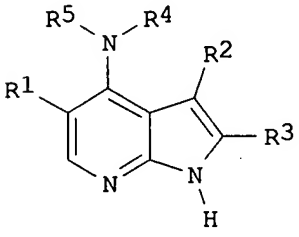
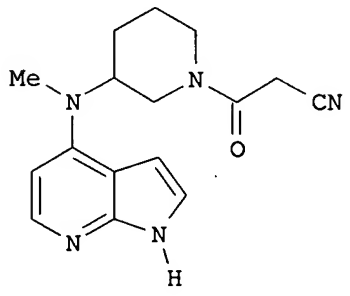


I



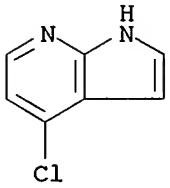
II

AB The present invention provides pyrrolo[2,3-b]pyrimidinylamines and pyrrolo[2,3-b]pyridine-4-ylamines of formula I, that modulate the activity of Janus kinases and are useful in the treatment of diseases related to activity of Janus kinases including, for example, immune-related diseases and cancer. Compds. of formula I wherein R1-R3 are independently H, halo, C1-4 (halo)alkyl, C2-4 alkenyl, C2-4 alkynyl, (hetero)aryl, (hetero)cycloalkyl, CN, NO2, OH and derivs., SH and derivs., CHO and derivs., CONH2 and derivs., CO2H and derivs., etc.; R4 is H, C1-4 alkyl, C2-4 alkenyl, C2-4 alkynyl, SO2R9, SOR9, (un)substituted (hetero)cycloalkyl, etc.; R8 (un)substituted 3-8 membered (hetero)cycloalkyl, (un)substituted L-(3-8 membered (hetero)cycloalkyl); L

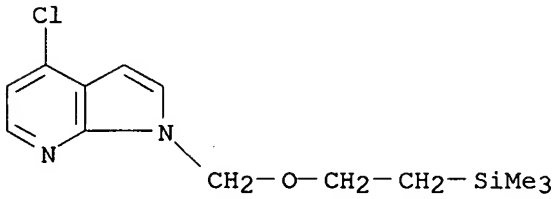
is C1-4 alkylenyl, C1-4 alkenylyl, O , S, NH and derivs., CO, CO2, OCO, etc.; R9 is (un)substituted C1-4 alkyl, (un)substituted (hetero)aryl, (un)substituted (hetero)cycloalkyl; and their pharmaceutically acceptable salts and prodrugs thereof are claimed. Example compound II was prepared via oxygenation of 1H-pyrrolo[2,3-b]pyridine; the resulting 1H-pyrrolo[2,3-b]pyridine 7-oxide underwent chlorination and deoxygenation with methanesulfonyl chloride to give 4-chloro-1H-pyrrolo[2,3-b]pyridine, which underwent amination with 1-benzyl-N-methyl-piperidine-3-amine to give the corresponding amine, which underwent debenzylation to give N-methyl-N-piperidin-3-yl-N-(1H-pyrrolo[2,3-b]pyridin-4-yl)amine trihydrochloride, which underwent amidation with cyanoacetic acid to give compound II. All the invention compds. were evaluated for their Janus kinase inhibitory activity. The tested compds. that exhibited an IC50 of about 10 μM or less are considered to be active compds.

IT 55052-28-3P, 4-Chloro-1H-pyrrolo[2,3-b]pyridine
869335-19-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation of pyrrolo-pyridinyl amines and pyrrolo-pyrimidinyl amines as Janus kinases inhibitors useful in treatment of diseases)

RN 55052-28-3 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 4-chloro- (CA INDEX NAME)



RN 869335-19-3 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 4-chloro-1-[[2-(trimethylsilyl)ethoxy]methyl]-(9CI) (CA INDEX NAME)



L6 ANSWER 4 OF 24 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:411957 HCAPLUS
DOCUMENT NUMBER: 144:450728
TITLE: Ortho-condensed pyridine and pyrimidine derivatives (e. g. purines) as protein kinases inhibitors and their preparation, pharmaceutical compositions and use for treatment of protein kinase mediated diseases such as proliferative diseases
INVENTOR(S): Berdini, Valerio; Boyle, Robert George; Saxty, Gordon; Walker, David Winter; Woodhead, Steven John; Wyatt, Paul Graham; Caldwell, John; Collins, Ian; Da Fonseca,

10/ 502,538

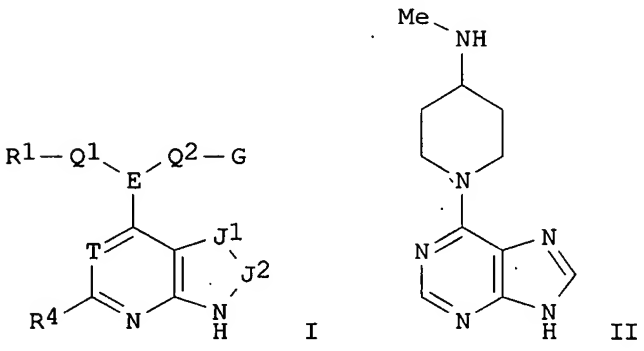
Tatiana Faria
PATENT ASSIGNEE(S): Astex Therapeutics Ltd., UK; The Institute of Cancer ResearchRoyal Cancer Hospital; Cancer Research Technology Limited
SOURCE: PCT Int. Appl., 223 pp., which
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006046024	A1	20060504	WO 2005-GB4119	20051025

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.:
GB 2004-23655 A 20041025
US 2004-621821P P 20041025
US 2005-684119P P 20050524

OTHER SOURCE(S): MARPAT 144:450728
GI

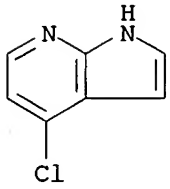


AB The invention provides a compound for use as a protein kinase B inhibitor, the compound being a compound of the formula I or salts, solvates, tautomers or N-oxides thereof. Compds. of formula I where in T is N or CR5; J1-J2 is N=CR6, R7C=N, R8NCO, (R8)2CO, N=N, or R7C=CR6; E is 5- to 6-membered carbocyclic or heterocyclic group; Q1 is a bond, C1-3 saturated hydrocarbon where one of the carbon atoms may be optionally replaced by O or N, or an adjacent pair of carbons be replaced by CONH and derivs., or NHCO and derivs.; Q2 is a bond, (un)substituted saturated C1-3 hydrocarbon, where one of the carbon atoms my be optionally replaced by N or O; G is H, NH2 and derivs., OH, or SH, with the provision that E is (hetero)aryl and Q2 is a bond, then G is H; R1 is H, or (hetero)aryl;R4, R6, and R8 are

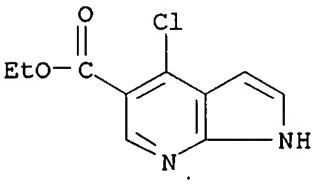
independently H, halo, C1-5 saturated hydrocarbyl, CN, CONH2, CONHR9, CF3, NH2, NHCOR9, or NHCONHR9; R5 and R7 are independently H, halo, C1-5 saturated heterocarbyl, CN, or CF3; R9 is (un)substituted Ph, or (un)substituted Bn; or their pharmaceutically acceptable salts, solvates, tautomers, or N-oxides thereof. Example compound II was prepared by amination of 9-(tetrahydropyran-2-yl)-6-chloropurine with 4-(N-Boc)piperidine;the resulting [1-[9-(tetrahydropyran-2-yl)-9H-purin-6-yl]piperidin-4-yl]carbamic acid tert-Bu ester underwent methylation with Me iodide to give methyl-[1-[9-(tetrahydropyran-2-yl)-9H-purin-6-yl]piperidin-4-yl]carbamic acid tert-Bu ester, which underwent hydrolysis to give example compound II. All the invention compds. were tested for their protein kinase inhibitory activity. From the assay it was determined that compound II and some of the other example compds. exhibited IC50 values of less than 10 μM against both protein kinase A and B. The invention compds. were also evaluated for their antiproliferative activity. Many of the invention compds. were found to have IC50 values of less than 25 μM and the preferred compds. have IC50 values of less than 15 μM.

IT 55052-28-3P 885500-55-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation of ortho-condensed pyridine and pyrimidine derivs. (e. g. purines) as protein kinases inhibitors useful for treatment of protein kinase mediated diseases such as proliferative diseases)

RN 55052-28-3 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 4-chloro- (CA INDEX NAME)



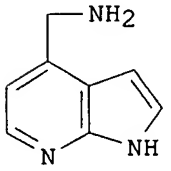
RN 885500-55-0 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine-5-carboxylic acid, 4-chloro-, ethyl ester (9CI) (CA INDEX NAME)



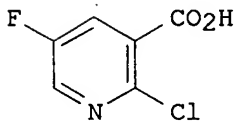
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 5 OF 24 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:311852 HCAPLUS
DOCUMENT NUMBER: 145:7958
TITLE: A Practical Synthesis of 2-((1H-Pyrrolo[2,3-b]pyridine-4-yl)methylamino)-5-fluoronicotinic Acid
AUTHOR(S): Wang, Xin; Zhi, Ben; Baum, Jean; Chen, Ying; Crockett, Richard; Huang, Liang; Eisenberg, Shawn; Ng, John;

Larsen, Robert; Martinelli, Mike; Reider, Paul
CORPORATE SOURCE: Chemical Process R & D, Amgen Inc., Thousand Oaks, CA, 91320-1799, USA
SOURCE: Journal of Organic Chemistry (2006), 71(10), 4021-4023
CODEN: JOCEAH; ISSN: 0022-3263
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 145:7958
GI

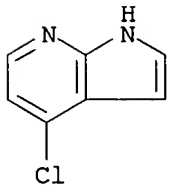


I



II

AB A practical synthesis of a key pharmaceutical intermediate, 2-[(1H-pyrrolo[2,3-b]pyridine-4-yl)methylamino]-5-fluoronicotinic acid is described. To introduce the aminomethyl moiety of I via a palladium-catalyzed cyanation/reduction sequence, a regioselective chlorination of 7-azaindole via the N-oxide was developed. A highly selective monodechlorination of 2,6-dichloro-5-fluoronicotinic acid was discovered to afford the nicotinic acid II. The two building blocks I and II were then coupled to complete the preparation of the title compound
IT 55052-28-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis of 2-((1H-pyrrolo[2,3-b]pyridine-4-yl)methylamino)-5-fluoronicotinic acid via monodechlorination as a key step)
RN 55052-28-3 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 4-chloro- (CA INDEX NAME)



REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 6 OF 24 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:152549 HCAPLUS
DOCUMENT NUMBER: 144:232928
TITLE: Preparation of heterocyclic compounds as novel antimalaria agents
INVENTOR(S): Nakamoto, Kazutaka; Matsukura, Masayuki; Tanaka, Keigo; Inoue, Satoshi; Tsukada, Itaru; Haneda, Toru; Ueda, Norihiro; Abe, Shinya; Sagane, Koji
PATENT ASSIGNEE(S): Eisai Co., Ltd., Japan
SOURCE: PCT Int. Appl., 326 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006016548	A1	20060216	WO 2005-JP14505	20050808

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

WO 2005033079	A1	20050414	WO 2004-JP14063	20040927

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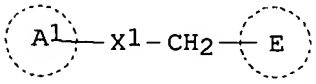
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:	JP 2004-232617	A	20040809
	WO 2004-JP14063	A	20040927
	JP 2005-82760	A	20050322
	JP 2003-342273	A	20030930
	JP 2004-68186	A	20040310

OTHER SOURCE(S): MARPAT 144:232928
GI



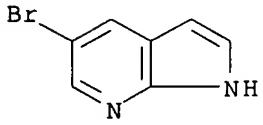
I

AB Antimalaria agents containing compds. represented by the formula (I) (wherein A1 = each optionally substituted 3-pyridyl or 6-quinolyl; X1 = -C(:Y1)-NH-; Y1 = O; E = each optionally substituted furyl, thienyl, or phenyl; provided that A1 may have one to three substituents and E has one or two substituents), salts of the compds., or hydrates of either are disclosed. Thus, a solution of 2-aminonicotinic acid and [[5-(3-chlorobenzyl)furan-2-yl]methyl]amine in DMF was treated with benzotriazol-1-yl-tris(dimethylamino)phosphonium hexafluorophosphate and Et3N and stirred at 80° for 40 min to give 2-amino-N-[5-(3-chlorobenzyl)furan-2-ylmethyl]nicotinamide (II). II showed min. inhibitory concentration of 6.25 μg/mL against yeast expressing plasmodium GWT1 gene (opfGWT1).

IT 183208-35-7P, 5-Bromo-1H-pyrrolo[2,3-b]pyridine
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)
(intermediate; preparation of heterocyclic compds. such as nicotinamide quinolinecarboxamide derivs. as antimalaria agents)

RN 183208-35-7 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 5-bromo- (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 7 OF 24 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:1215922 HCAPLUS
DOCUMENT NUMBER: 143:460179
TITLE: Preparation of substituted phenylaminopyrimidines for use as cardiovascular agents
INVENTOR(S): Schirok, Hartmut; Stasch, Johannes-Peter; Kast, Raimund; Muenter, Klaus; Gnoth, Mark Jean; Figueroa Perez, Santiago; Thutewohl, Michael; Bennabi, Samir; Lang, Dieter; Mittendorf, Joachim; Radtke, Martin; Ehmke, Heimo
PATENT ASSIGNEE(S): Bayer Healthcare A.-G., Germany
SOURCE: PCT Int. Appl., 117 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005108397	A1	20051117	WO 2005-EP3925	20050414
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
DE 102004020570	A1	20051124	DE 2004-102004020570	20040427
CA 2564629	A1	20051117	CA 2005-2564629	20050414
EP 1742945	A1	20070117	EP 2005-739438	20050414
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR				

PRIORITY APPLN. INFO.: DE 2004-102004020570A 20040427
WO 2005-EP3925 W 20050414
OTHER SOURCE(S): MARPAT 143:460179
GI

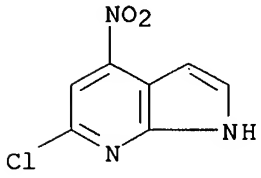
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The invention relates to substituted phenylaminopyrimidines I [X = NR6, CR7R8, C(:O); R1 = H, halogen, CN, (un)substituted C1-6-alkyl, C3-6-cycloalkyl, C1-6-alkoxycarbonyl, C1-6-alkylaminocarbonyl; R2 = F, Cl; R3 = H, OH, halogen, CF3, CF2CF3, (un)substituted C1-6-alkyl, C1-6-alkoxy, C3-8-cycloalkyl, C6-10-aryl, C6-10-aryloxy, 5- to 10-membered heteroaryl, heteroaryloxy, heterocyclyl, NR11R12, C(:O)R19; R4 = H, F, Cl; R5 = H, C1-6-alkyl; R6 = H, C1-3-alkyl; R7, R8 = H, Me; R12, R12 = H, C1-6-alkyl, C3-8-cycloalkyl, 5- to 10-membered heteroaryl; NR11R12 = 4- to 6-membered heterocycle, 7- to 12-membered bi- or tricyclic heterocycle; R19 = C1-6-alkoxy, C1-6-alkylamino, N-(monocyclic heterocycle), N-(bicyclic heterocycle); dashed line = single or double bond] or their salts, solvates or salt solvates, to a method for their production and to their use for producing medicaments for the treatment and/or prophylaxis of diseases in humans and animals, in particular for the treatment of cardiovascular diseases. The method for their preparation comprises: reaction of [4-(1H-pyrrolo[2,3-b]pyridin-4-yl)methyl]aniline derivs. II with pyrimidines III. Thus, 4-(3-fluoroanilino)-2-pyrimidinamine derivative IV was prepared from 3-fluoro-[4-(1H-pyrrolo[2,3-b]pyridin-4-yl)methyl]aniline V via amination of 4-chloro-6-(trifluoromethyl)pyridin-2-amine in aqueous HCl. Aniline V was prepared from 1H-pyrrolo[2,3-b]pyridine via N-oxidation with 3-ClC6H4CO2OH in CH2Cl2, regioselective nitration, N-alkylation with ClCH2OCH2CH2SiMe3 in DMF containing NaH, regioselective chlorination with ClCO2Me in THF containing hexamethyldisilazane, nucleophilic substitution with 3-F-4-O2NC6H3CH2CO2Me, decarbonylation with LiOH in wet MeOH, hydrogenolysis in EtOH containing Et3N and catalytic Pd/C and N-deprotection with with CF3CO2H in CH2Cl2. The bioactivity of II was determined [IC50 = 7 nM vs. Rho-kinase II (ROKα); IC50 = 86 nM vs. blood vessel contraction (in vitro)].

IT 688781-87-5P, 6-Chloro-4-nitro-1H-pyrrolo[2,3-b]pyridine
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and N-alkylation of, with [2-(trimethylsilyl)ethoxy]methyl chloride; preparation of substituted phenylaminopyrimidines for use as cardiovascular agents)

RN 688781-87-5 HCAPLUS

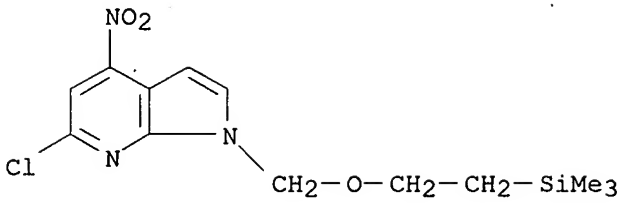
CN 1H-Pyrrolo[2,3-b]pyridine, 6-chloro-4-nitro- (9CI) (CA INDEX NAME)



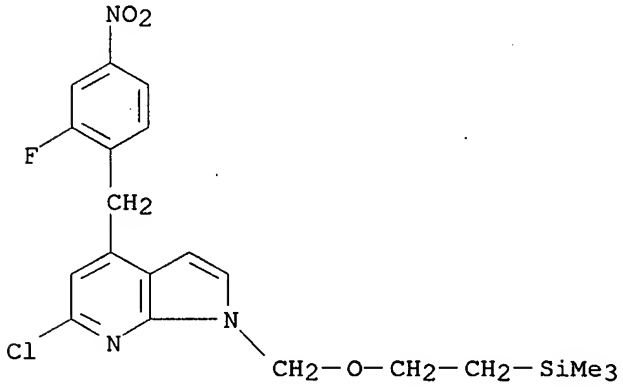
IT 869335-22-8P 869335-31-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and hydrogenolysis of; preparation of substituted phenylaminopyrimidines for use as cardiovascular agents)

RN 869335-22-8 HCAPLUS

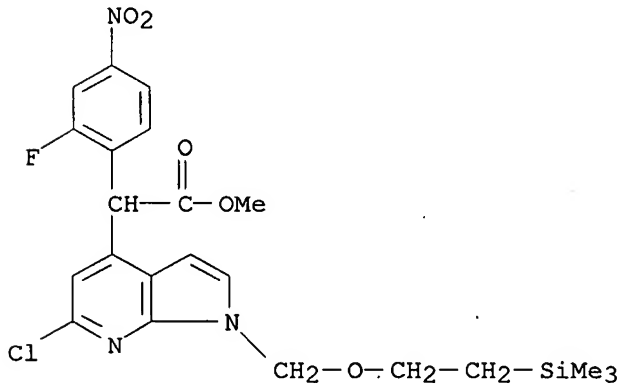
CN 1H-Pyrrolo[2,3-b]pyridine, 6-chloro-4-nitro-1-[[2-(trimethylsilyl)ethoxy]methyl]- (9CI) (CA INDEX NAME)



RN 869335-31-9 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 6-chloro-4-[(2-fluoro-4-nitrophenyl)methyl]-1-[[2-(trimethylsilyl)ethoxy]methyl]- (9CI) (CA INDEX NAME)



IT 869335-30-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation, hydrolysis and decarboxylation of; preparation of substituted phenylaminopyrimidines for use as cardiovascular agents)
RN 869335-30-8 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine-4-acetic acid, 6-chloro-α-(2-fluoro-4-nitrophenyl)-1-[[2-(trimethylsilyl)ethoxy]methyl]-, methyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

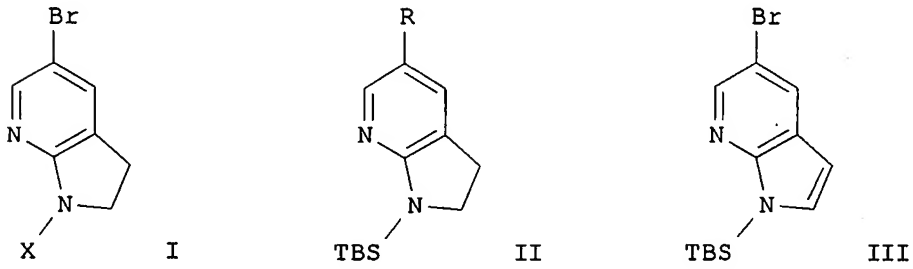
L6 ANSWER 8 OF 24 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:756718 HCAPLUS

DOCUMENT NUMBER: 141:260554
TITLE: Preparation of azaindoline intermediates with novel amino-protecting groups such as TBS-protected 5-bromo-7-azaindoline, and their applications to the synthesis of 5-substituted 7-azaindolines and 7-azaindoles
INVENTOR(S): Graczyk, Piotr; Khan, Afzal; Bhatia, Gurpreet
PATENT ASSIGNEE(S): Eisai London Research Laboratories Limited, UK; Eisai Co., Ltd.
SOURCE: PCT Int. Appl., 92 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004078757	A2	20040916	WO 2004-GB946	20040305
WO 2004078757	A3	20050901		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1633750	A2	20060315	EP 2004-717703	20040305
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK				
JP 2006520771	T	20060914	JP 2006-505923	20040305
US 2006235042	A1	20061019	US 2006-548162	20060313

PRIORITY APPLN. INFO.: GB 2003-5142 A 20030306
WO 2004-GB946 W 20040305

OTHER SOURCE(S): CASREACT 141:260554; MARPAT 141:260554
GI

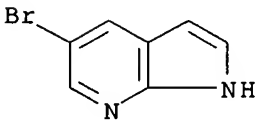


AB The invention provides a novel substituted azaindoline intermediate of formula I, wherein X is an amino-protecting group except Cbz, such as PhC(O)CH2-, CH2=CH-, ClCH2CH2-, Ph3C-, Ph2(4-pyridyl)C-, Me2N-, HOCH2-, t-BuOC(O)CH2-, Me2NCH2-, PhSO2-, and TBS, and a method for its synthesis. The intermediate I is provided for use in the manufacture of 5-substituted 7-azaindolines and 5-substituted 7-azaindoles. The key finding of this invention is that amino-protecting groups play a crucial role in the preparation of the intermediates and subsequent chemical transformations into various azaindol(in)es in an efficient and cost-effective way. The usefulness of TBS as protecting group has been fully demonstrated. For

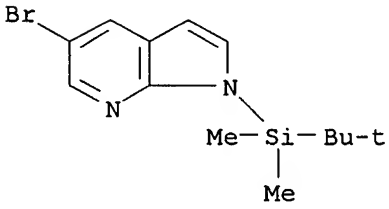
example, 7-azaindole was reduced to 7-azaindoline with HCOOH and Et3N in the presence of Pd/C, and the product was silylated with TBSCl followed by bromination with bromine in pyridine to give intermediate II (R = Br). Lithiation of II (R = Br) with t-BuLi followed by the addition of electrophiles such as DMF afforded various derivs. such as II (R = CHO), which were further oxidized to their azaindole counterparts. Conversions of the bromine atom of II (R = Br) to stannyl or silyl groups via metal-exchange, and further applications were given. Oxidation of II (R = Br) with DDQ led to azaindole intermediate III, whose chemical in reactions such as the Suzuki and Stille reactions was shown.

IT 183208-35-7P 754214-54-5P 754214-88-5P
754214-89-6P 754214-90-9P 754214-91-0P
754214-92-1P 754214-93-2P 754214-94-3P
754214-95-4P 754214-96-5P 754214-97-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of silyl azaindolines and their applications to the synthesis of 5-substituted 7-azaindolines and 7-azaindoles)

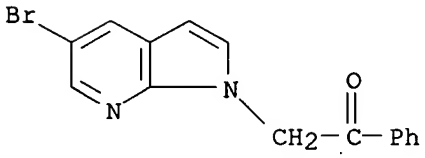
RN 183208-35-7 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 5-bromo- (CA INDEX NAME)



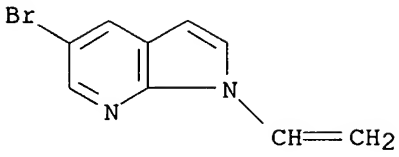
RN 754214-54-5 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 5-bromo-1-[(1,1-dimethylethyl)dimethylsilyl]- (9CI) (CA INDEX NAME)



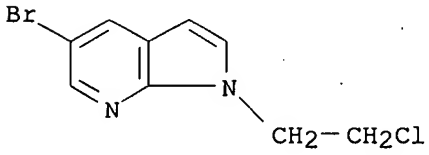
RN 754214-88-5 HCAPLUS
CN Ethanone, 2-(5-bromo-1H-pyrrolo[2,3-b]pyridin-1-yl)-1-phenyl- (9CI) (CA INDEX NAME)



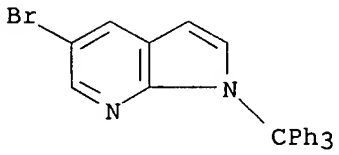
RN 754214-89-6 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 5-bromo-1-ethenyl- (9CI) (CA INDEX NAME)



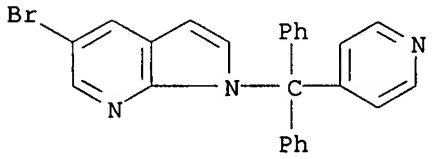
RN 754214-90-9 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 5-bromo-1-(2-chloroethyl)- (9CI) (CA INDEX NAME)



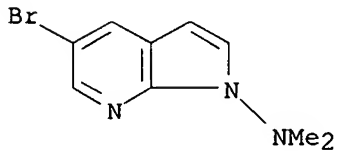
RN 754214-91-0 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 5-bromo-1-(triphenylmethyl)- (9CI) (CA INDEX NAME)



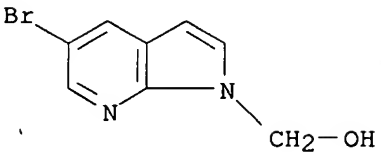
RN 754214-92-1 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 5-bromo-1-(diphenyl-4-pyridinylmethyl)- (9CI) (CA INDEX NAME)



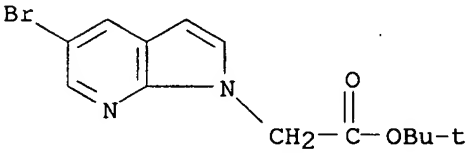
RN 754214-93-2 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridin-1-amine, 5-bromo-N,N-dimethyl- (9CI) (CA INDEX NAME)



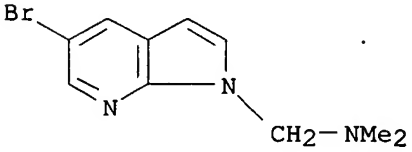
RN 754214-94-3 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine-1-methanol, 5-bromo- (9CI) (CA INDEX NAME)



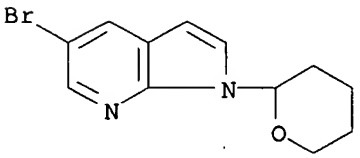
RN 754214-95-4 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine-1-acetic acid, 5-bromo-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 754214-96-5 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine-1-methanamine, 5-bromo-N,N-dimethyl- (9CI) (CA INDEX NAME)



RN 754214-97-6 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 5-bromo-1-(tetrahydro-2H-pyran-2-yl)- (9CI) (CA INDEX NAME)



L6 ANSWER 9 OF 24 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:610149 HCAPLUS
DOCUMENT NUMBER: 141:157028
TITLE: Preparation of 2-carboxamido-3-aminothiophene derivatives for treatment of hyperproliferative disorder
INVENTOR(S): Wynne, Graham Michael; Doyle, Kevin; Ahmed, Saleh; Li, An-hu; Keily, John Fraser; Rasamison, Chrystelle; Pegg, Neil Anthony; Saba, Imaad; Thomas, Claire; Smyth, Don; Sadiq, Shazia; Newton, Gary; Dawson, Graham; Crew, Andrew Philip; Castelano, Arlindo Lucas
PATENT ASSIGNEE(S): Osi Pharmaceuticals, Inc., USA
SOURCE: PCT Int. Appl., 49 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English

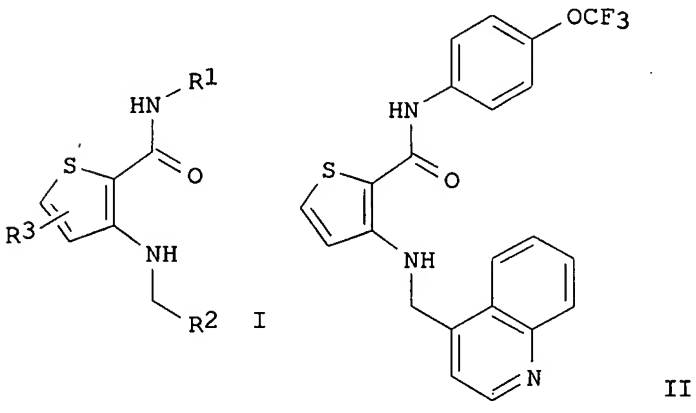
10/ 502,538

FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004063330	A2	20040729	WO 2004-US1188	20040106
WO 2004063330	A3	20050217		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ				
AU 2004204135	A1	20040729	AU 2004-204135	20040106
CA 2512608	A1	20040729	CA 2004-2512608	20040106
EP 1590328	A2	20051102	EP 2004-700407	20040106
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2004006646	A	20051206	BR 2004-6646	20040106
CN 1723200	A	20060118	CN 2004-80001915	20040106
LV 13360	B	20060120	LV 2005-85	20050705
US 2006247275	A1	20061102	US 2006-476952	20060628

PRIORITY APPLN. INFO.:	US 2003-438152P	P	20030106
	US 2003-524972P	P	20031125
	US 2003-526358P	P	20031202
	US 2004-752342	A3	20040106
	WO 2004-US1188	W	20040106
	US 2005-116007	A3	20050427

OTHER SOURCE(S): MARPAT 141:157028
GI

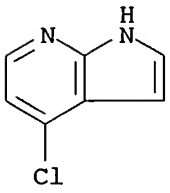


AB Title compds. I [wherein R1 = 4-F3COC6H5, 4-ClC6H4, 4-Br-3-MeC6H4, 2,2,3,3-tetrafluorobenzodioxan-6-yl; R2 = quinolin-4-yl, 2-MeNHCO-pyridyl-4-yl, pyrrolo[2,3-b]pyridin-3-yl, pyrrolo[2,3-b]pyridin-4-yl; R3 = alkyl; and pharmaceutically acceptable salts or N-oxides thereof] were prepared as c-Kit tyrosine kinase inhibitors. For example, amidation of Me 3-amino-2-thiophenecarboxylate with 4-trifluoromethoxyaniline, followed by condensation with quinoline-4-carboxaldehyde, gave II. I showed better activity inhibiting c-Kit kinase than the nearest similar thiophene compds. in the art. Thus, I and their pharmaceutical compns. are useful for the treatment of hyperproliferative disorders (no data).

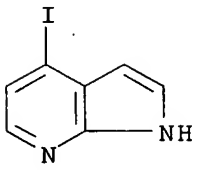
IT 55052-28-3P, 4-Chloro-1H-pyrrolo[2,3-b]pyridine

319474-34-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of 2-carboxamido-3-aminothiophene derivs. as c-Kit kinase inhibitors for treatment of hyperproliferative disorder)

RN 55052-28-3 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 4-chloro- (CA INDEX NAME)



RN 319474-34-5 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 4-iodo- (9CI) (CA INDEX NAME)



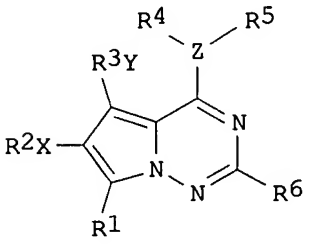
L6 ANSWER 10 OF 24 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:80698 HCAPLUS
DOCUMENT NUMBER: 140:146173
TITLE: Preparation of pyrrolotriazines as selective VEGFR-2 and FGFR-1 kinase inhibitors for treatment of proliferative diseases
INVENTOR(S): Bhide, Rajeev; Ruel, Rejean; Thibeault, Carl; L'heureux, Alexandre
PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA
SOURCE: PCT Int. Appl., 66 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004009601	A1	20040129	WO 2003-US22554	20030718
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2492665	A1	20040129	CA 2003-2492665	20030718

AU 2003254017	A1	20040209	AU 2003-254017		20030718
US 2004063707	A1	20040401	US 2003-622593		20030718
US 6969717	B2	20051129			
US 2004072832	A1	20040415	US 2003-623171		20030718
US 6869952	B2	20050322			
EP 1539763	A1	20050615	EP 2003-765754		20030718
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK					
CN 1681818	A	20051012	CN 2003-821820		20030718
CN 1681508	A	20051012	CN 2003-821915		20030718
JP 2005538990	T	20051222	JP 2004-523591		20030718
CN 1903840	A	20070131	CN 2006-10115789		20030721
US 2005124621	A1	20050609	US 2005-35248		20050113
NO 2005000417	A	20050217	NO 2005-417		20050125
US 2006058304	A1	20060316	US 2005-214267		20050829
PRIORITY APPLN. INFO.:			US 2002-397256P	P	20020719
			US 2003-447213P	P	20030213
			US 2003-622280	A	20030718
			US 2003-622593	A3	20030718
			US 2003-623171	A1	20030718
			WO 2003-US22554	W	20030718
			CN 2003-816201	A3	20030721

OTHER SOURCE(S): MARPAT 140:146173

GI



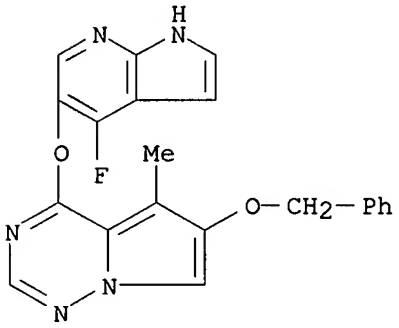
I

AB Title compds. I [Z = O, S, N, etc.; X, Y = O, OCO, S, etc.; R1 = H, CH3, OH, etc.; R2, R3 = H, (un)substituted alkyl, alkenyl etc.; R4 = (un)substituted 7-azaindolyl, e.g., F, Cl, Me; R5 = H, absent when Z = O, S; R6 = H, (un)substituted alkyl, aryl, etc.] and their pharmaceutically acceptable salts were prepared For example, electrophilic substitution of compound I [R1 = H; R2X = benzyloxy; R3Y = CH3; ZR5R6 = Cl] with 4-fluoro-5-hydroxy-7-azaindole, e.g., prepared from 4-chloro-1H-pyrrolo[2,3-b]pyridine in 6-steps, afforded compound I [R1 = H; R2X = benzyloxy; R3Y = CH3; ZR5R6 = 4-fluoro-7-azaindol-5-yloxy] in 80% yield. In VEGFR-2 and FGFR-1 kinase assays, 38-examples of compds. I exhibited IC50 values ranging from 0.001-10 μM. Of note, pyrrolotriazines I exhibited selective VEGFR-2 and FGFR-1 kinase inhibition (no data provided). Compds. I are claimed useful for the treatment of cancer, inflammation, autoimmune diseases.

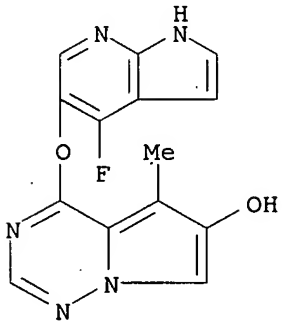
IT 651743-86-1P 651743-87-2P 651743-88-3P
651743-89-4P 651743-92-9P 651743-93-0P
651743-94-1P 651743-96-3P 651743-97-4P
651743-99-6P 651744-01-3P 651744-02-4P
651744-03-5P 651744-05-7P 651744-06-8P
651744-09-1P 651744-10-4P 651744-11-5P
651744-12-6P 651744-52-4P 651744-55-7P
651744-56-8P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(Uses)
(preparation of pyrrolotriazines as selective VEGFR-2 and FGFR-1 kinase inhibitors for treatment of proliferative diseases)

RN 651743-86-1 HCAPLUS
CN Pyrrolo[2,1-f][1,2,4]triazine, 4-[(4-fluoro-1H-pyrrolo[2,3-b]pyridin-5-yl)oxy]-5-methyl-6-(phenylmethoxy)- (9CI) (CA INDEX NAME)

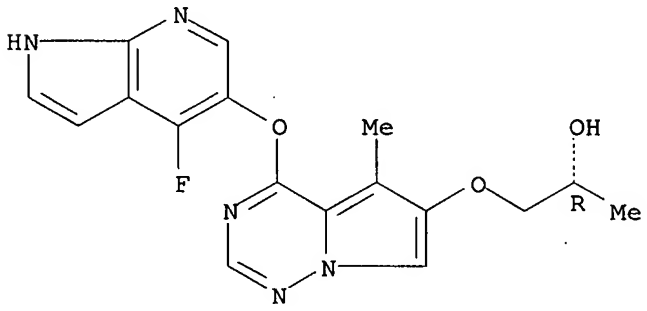


RN 651743-87-2 HCAPLUS
CN Pyrrolo[2,1-f][1,2,4]triazin-6-ol, 4-[(4-fluoro-1H-pyrrolo[2,3-b]pyridin-5-yl)oxy]-5-methyl- (9CI) (CA INDEX NAME)



RN 651743-88-3 HCAPLUS
CN 2-Propanol, 1-[[4-[(4-fluoro-1H-pyrrolo[2,3-b]pyridin-5-yl)oxy]-5-methylpyrrolo[2,1-f][1,2,4]triazin-6-yl]oxy]-, (2R)- (9CI) (CA INDEX NAME)

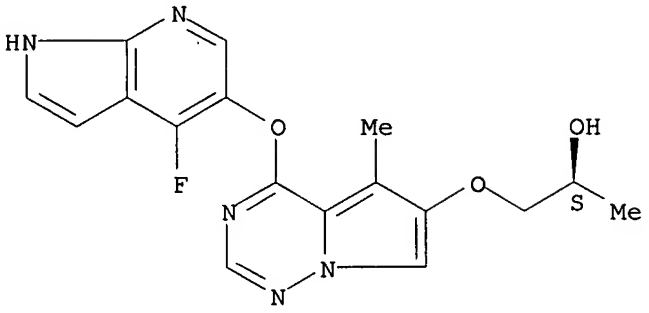
Absolute stereochemistry.



RN 651743-89-4 HCAPLUS
CN 2-Propanol, 1-[[4-[(4-fluoro-1H-pyrrolo[2,3-b]pyridin-5-yl)oxy]-5-

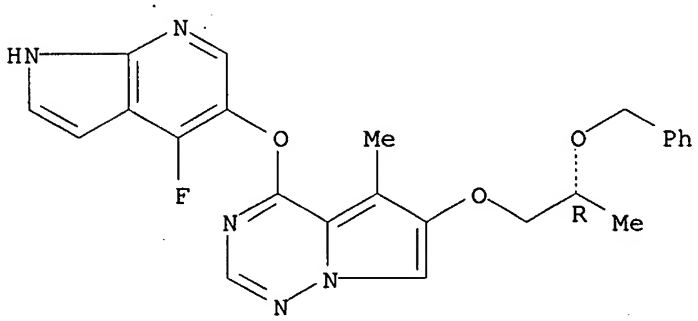
methylpyrrolo[2,1-f][1,2,4]triazin-6-yl]oxy]-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



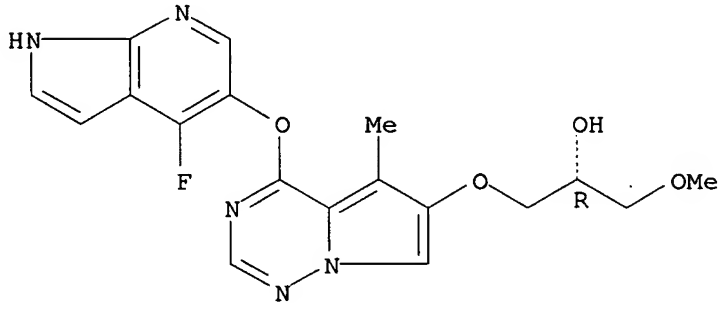
RN 651743-92-9 HCAPLUS
CN Pyrrolo[2,1-f][1,2,4]triazine, 4-[(4-fluoro-1H-pyrrolo[2,3-b]pyridin-5-yl)oxy]-5-methyl-6-[(2R)-2-(phenylmethoxy)propoxy]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



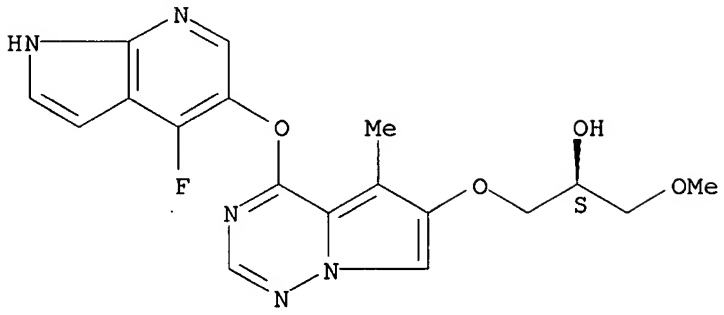
RN 651743-93-0 HCAPLUS
CN 2-Propanol, 1-[[4-[(4-fluoro-1H-pyrrolo[2,3-b]pyridin-5-yl)oxy]-5-methylpyrrolo[2,1-f][1,2,4]triazin-6-yl]oxy]-3-methoxy-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

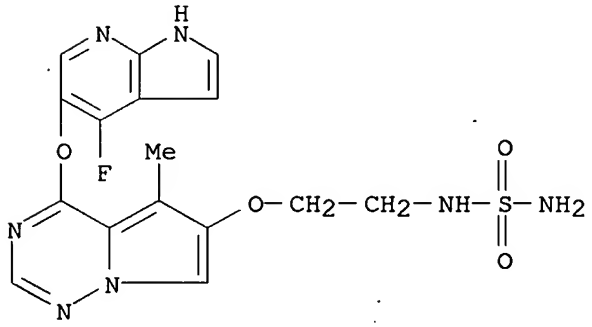


RN 651743-94-1 HCAPLUS
CN 2-Propanol, 1-[[4-[(4-fluoro-1H-pyrrolo[2,3-b]pyridin-5-yl)oxy]-5-methylpyrrolo[2,1-f][1,2,4]triazin-6-yl]oxy]-3-methoxy-, (2S)- (9CI) (CA INDEX NAME)

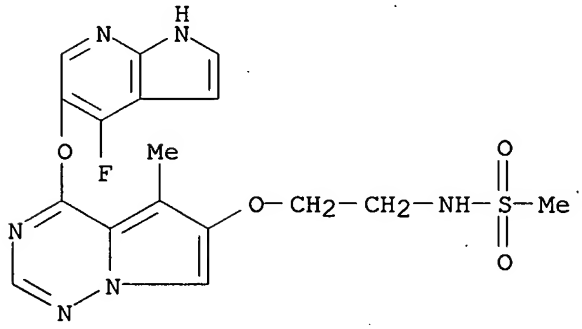
Absolute stereochemistry.



RN 651743-96-3 HCAPLUS
CN Sulfamide, [2-[[4-[(4-fluoro-1H-pyrrolo[2,3-b]pyridin-5-yl)oxy]-5-methylpyrrolo[2,1-f][1,2,4]triazin-6-yl]oxy]ethyl]- (9CI) (CA INDEX NAME)

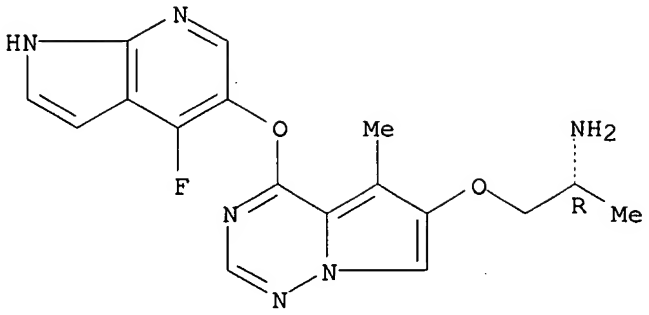


RN 651743-97-4 HCAPLUS
CN Methanesulfonamide, N-[2-[[4-[(4-fluoro-1H-pyrrolo[2,3-b]pyridin-5-yl)oxy]-5-methylpyrrolo[2,1-f][1,2,4]triazin-6-yl]oxy]ethyl]- (9CI) (CA INDEX NAME)

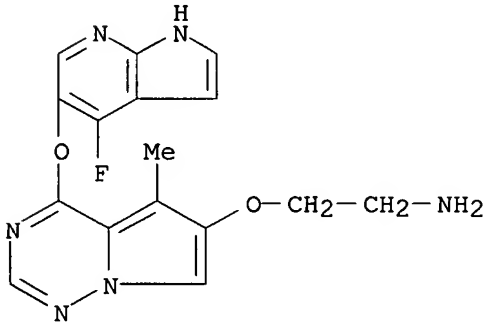


RN 651743-99-6 HCAPLUS
CN 2-Propanamine, 1-[[4-[(4-fluoro-1H-pyrrolo[2,3-b]pyridin-5-yl)oxy]-5-methylpyrrolo[2,1-f][1,2,4]triazin-6-yl]oxy]-, (2R)- (9CI) (CA INDEX NAME)

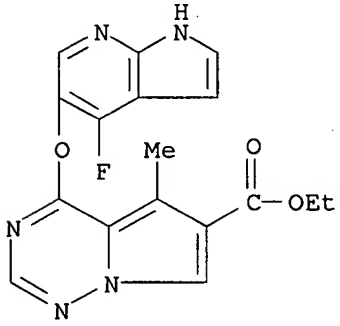
Absolute stereochemistry.



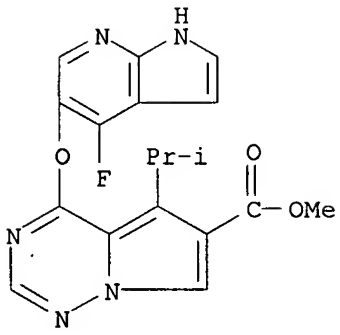
RN 651744-01-3 HCAPLUS
CN Ethanamine, 2-[[4-[(4-fluoro-1H-pyrrolo[2,3-b]pyridin-5-yl)oxy]-5-methylpyrrolo[2,1-f][1,2,4]triazin-6-yl]oxy]- (9CI) (CA INDEX NAME)



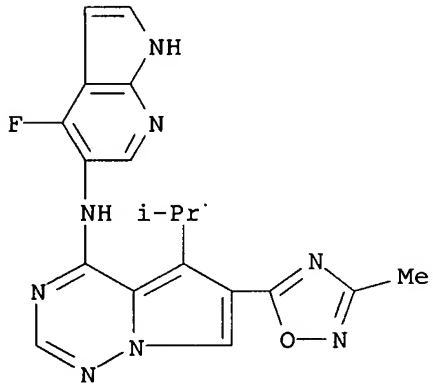
RN 651744-02-4 HCAPLUS
CN Pyrrolo[2,1-f][1,2,4]triazine-6-carboxylic acid, 4-[(4-fluoro-1H-pyrrolo[2,3-b]pyridin-5-yl)oxy]-5-methyl-, ethyl ester (9CI) (CA INDEX NAME)



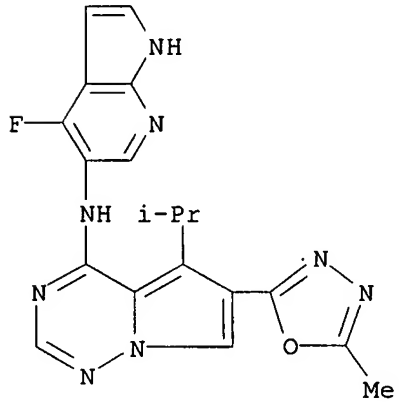
RN 651744-03-5 HCAPLUS
CN Pyrrolo[2,1-f][1,2,4]triazine-6-carboxylic acid, 4-[(4-fluoro-1H-pyrrolo[2,3-b]pyridin-5-yl)oxy]-5-(1-methylethyl)-, methyl ester (9CI) (CA INDEX NAME)



RN 651744-05-7 HCAPLUS
CN Pyrrolo[2,1-f][1,2,4]triazin-4-amine, N-(4-fluoro-1H-pyrrolo[2,3-b]pyridin-5-yl)-5-(1-methylethyl)-6-(3-methyl-1,2,4-oxadiazol-5-yl)- (9CI) (CA INDEX NAME)

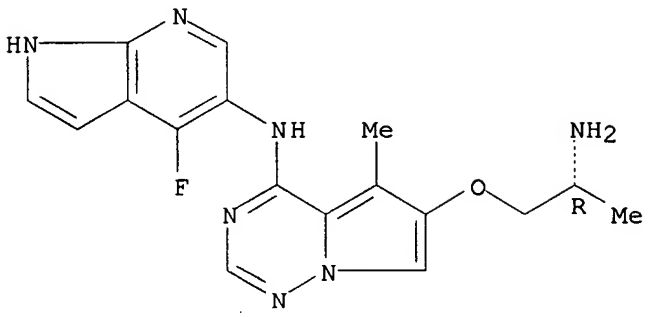


RN 651744-06-8 HCAPLUS
CN Pyrrolo[2,1-f][1,2,4]triazin-4-amine, N-(4-fluoro-1H-pyrrolo[2,3-b]pyridin-5-yl)-5-(1-methylethyl)-6-(5-methyl-1,3,4-oxadiazol-2-yl)- (9CI) (CA INDEX NAME)

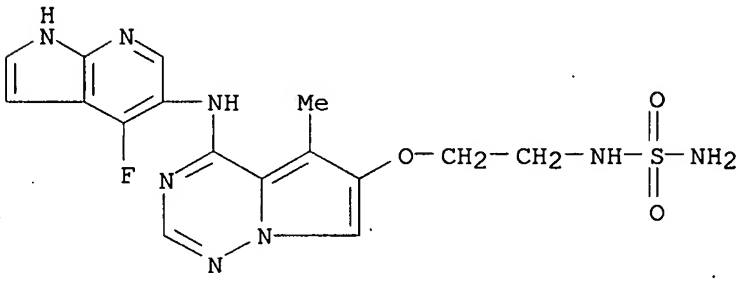


RN 651744-09-1 HCAPLUS
CN Pyrrolo[2,1-f][1,2,4]triazin-4-amine, 6-[(2R)-2-aminopropoxy]-N-(4-fluoro-1H-pyrrolo[2,3-b]pyridin-5-yl)-5-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

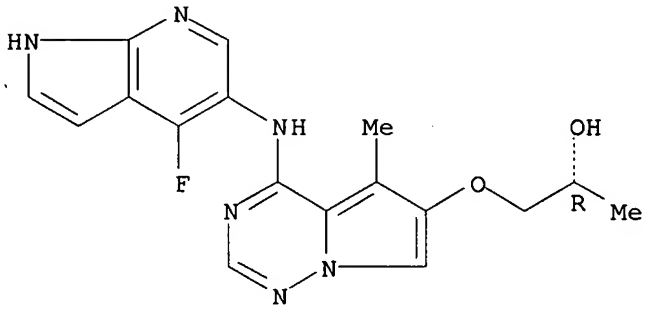


RN 651744-10-4 HCAPLUS
CN Sulfamide, [2-[[4-[(4-fluoro-1H-pyrrolo[2,3-b]pyridin-5-yl)amino]-5-methylpyrrolo[2,1-f][1,2,4]triazin-6-yl]oxy]ethyl]- (9CI) (CA INDEX NAME)

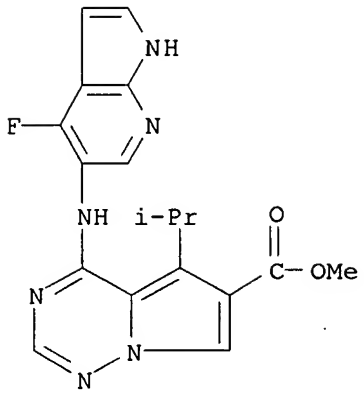


RN 651744-11-5 HCAPLUS
CN 2-Propanol, 1-[[4-[(4-fluoro-1H-pyrrolo[2,3-b]pyridin-5-yl)amino]-5-methylpyrrolo[2,1-f][1,2,4]triazin-6-yl]oxy]-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

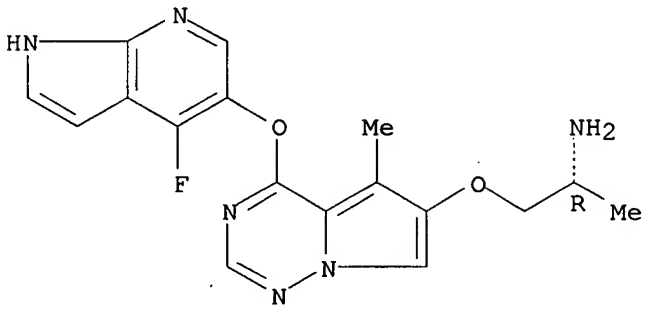


RN 651744-12-6 HCAPLUS
CN Pyrrolo[2,1-f][1,2,4]triazine-6-carboxylic acid, 4-[(4-fluoro-1H-pyrrolo[2,3-b]pyridin-5-yl)amino]-5-(1-methylethyl)-, methyl ester (9CI) (CA INDEX NAME)



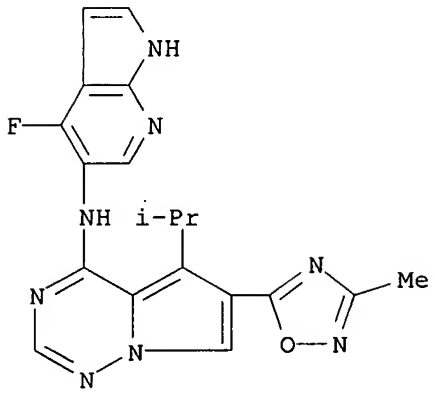
RN 651744-52-4 HCAPLUS
CN 2-Propanamine, 1-[[4-[(4-fluoro-1H-pyrrolo[2,3-b]pyridin-5-yl)oxy]-5-methylpyrrolo[2,1-f][1,2,4]triazin-6-yl]oxy]-, dihydrochloride, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



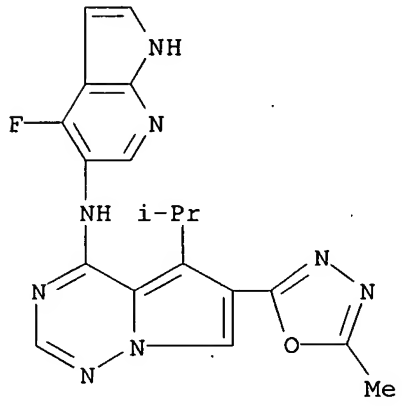
●2 HCl

RN 651744-55-7 HCAPLUS
CN Pyrrolo[2,1-f][1,2,4]triazin-4-amine, N-(4-fluoro-1H-pyrrolo[2,3-b]pyridin-5-yl)-5-(1-methylethyl)-6-(3-methyl-1,2,4-oxadiazol-5-yl)-, monohydrochloride (9CI) (CA INDEX NAME)



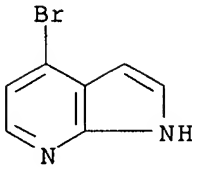
● HCl

RN 651744-56-8 HCAPLUS
CN Pyrrolo[2,1-f][1,2,4]triazin-4-amine, N-(4-fluoro-1H-pyrrolo[2,3-b]pyridin-5-yl)-5-(1-methylethyl)-6-(5-methyl-1,3,4-oxadiazol-2-yl)-, monohydrochloride (9CI) (CA INDEX NAME)

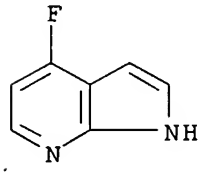


● HCl

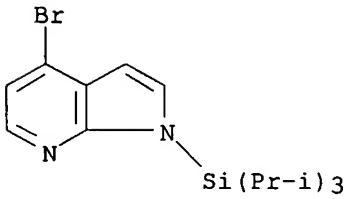
IT 348640-06-2P 640735-23-5P 640735-24-6P
640735-25-7P 651744-21-7P 651744-22-8P
651744-26-2P 651744-29-5P 651744-32-0P
651744-35-3P 651744-36-4P 651744-37-5P
651744-41-1P 651744-42-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of pyrrolotriazines as selective VEGFR-2 and FGFR-1 kinase inhibitors for treatment of proliferative diseases)
RN 348640-06-2 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 4-bromo- (CA INDEX NAME)



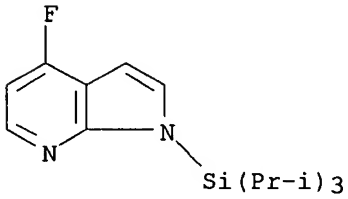
RN 640735-23-5 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 4-fluoro- (9CI) (CA INDEX NAME)



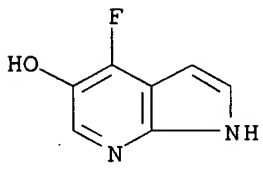
RN 640735-24-6 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 4-bromo-1-[tris(1-methylethyl)silyl]- (CA INDEX NAME)



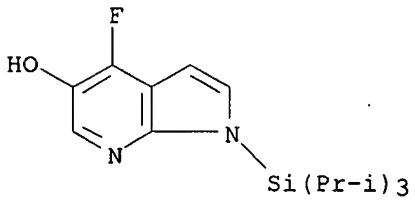
RN 640735-25-7 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 4-fluoro-1-[tris(1-methylethyl)silyl]- (9CI) (CA INDEX NAME)



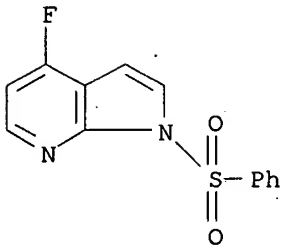
RN 651744-21-7 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridin-5-ol, 4-fluoro- (9CI) (CA INDEX NAME)



RN 651744-22-8 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridin-5-ol, 4-fluoro-1-[tris(1-methylethyl)silyl]- (9CI) (CA INDEX NAME)

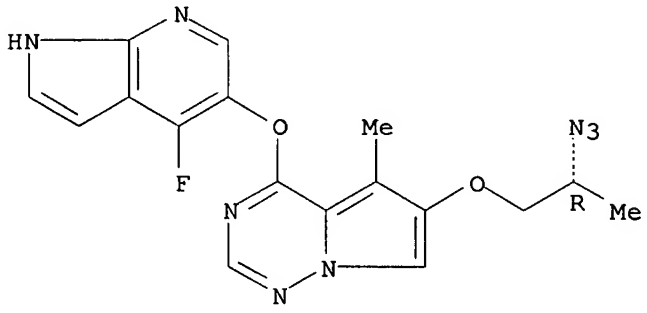


RN 651744-26-2 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 4-fluoro-1-(phenylsulfonyl)- (9CI) (CA INDEX NAME)

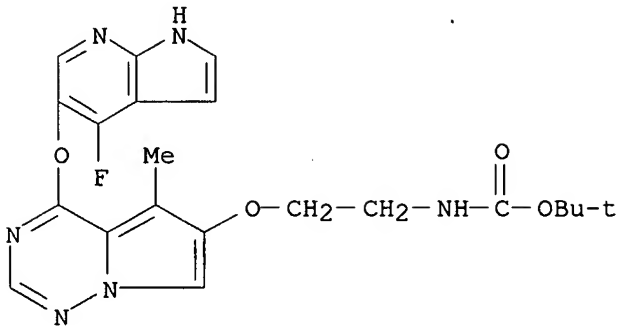


RN 651744-29-5 HCAPLUS
CN Pyrrolo[2,1-f][1,2,4]triazine, 6-[(2R)-2-azidopropoxy]-4-[(4-fluoro-1H-pyrrolo[2,3-b]pyridin-5-yl)oxy]-5-methyl- (9CI) (CA INDEX NAME)

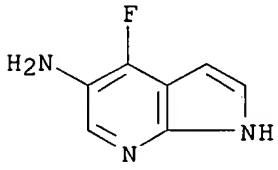
Absolute stereochemistry.



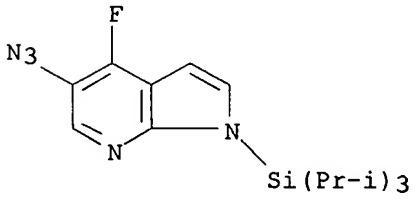
RN 651744-32-0 HCAPLUS
CN Carbamic acid, [2-[[4-[(4-fluoro-1H-pyrrolo[2,3-b]pyridin-5-yl)oxy]-5-methylpyrrolo[2,1-f][1,2,4]triazin-6-yl]oxy]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



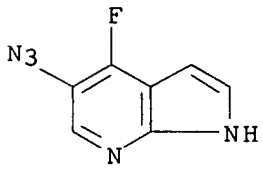
RN 651744-35-3 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridin-5-amine, 4-fluoro- (9CI) (CA INDEX NAME)



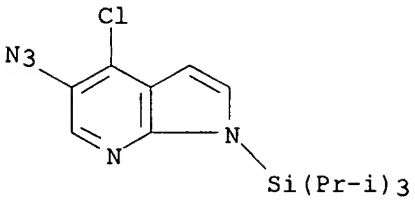
RN 651744-36-4 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 5-azido-4-fluoro-1-[tris(1-methylethyl)silyl]-
(9CI) (CA INDEX NAME)



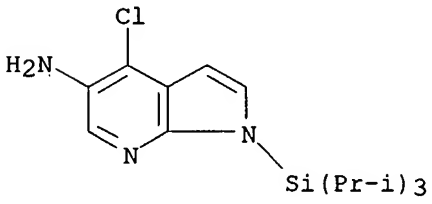
RN 651744-37-5 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 5-azido-4-fluoro- (9CI) (CA INDEX NAME)



RN 651744-41-1 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 5-azido-4-chloro-1-[tris(1-methylethyl)silyl]-
(9CI) (CA INDEX NAME)

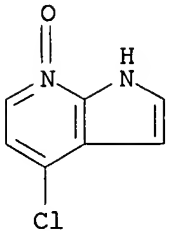


RN 651744-42-2 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridin-5-amine, 4-chloro-1-[tris(1-methylethyl)silyl]- (9CI) (CA INDEX NAME)

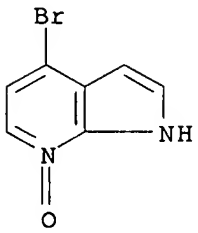


REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

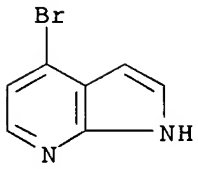
L6 ANSWER 11 OF 24 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:960502 HCAPLUS
DOCUMENT NUMBER: 140:77054
TITLE: Concise and Efficient Synthesis of 4-Fluoro-1H-pyrrolo[2,3-b]pyridine
AUTHOR(S): Thibault, Carl; L'Heureux, Alexandre; Bhide, Rajeev S.; Ruel, Rejean
CORPORATE SOURCE: Department of Discovery Chemistry, Pharmaceutical Research Institute, Bristol-Myers Squibb, Candiac, QC, J5R 1J1, Can.
SOURCE: Organic Letters (2003), 5(26), 5023-5025
CODEN: ORLEF7; ISSN: 1523-7060
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 140:77054
AB Two routes describing the preparation of 4-fluoro-1H-pyrrolo[2,3-b]pyridine from 1H-pyrrolo[2,3-b]pyridine N-oxide are presented. Regioselective fluorination was achieved using either the Balz-Schiemann reaction or Li-halogen exchange.
IT 74420-03-4P, 4-Chloro-1H-Pyrrolo[2,3-b]pyridine 7-oxide
640735-27-9P, 4-Bromo-1H-Pyrrolo[2,3-b]pyridine 7-oxide
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and attempted fluorination of)
RN 74420-03-4 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 4-chloro-, 7-oxide (9CI) (CA INDEX NAME)



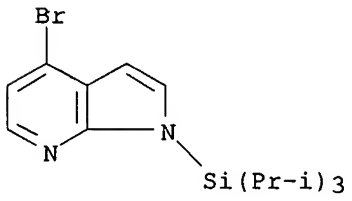
RN 640735-27-9 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 4-bromo-, 7-oxide (9CI) (CA INDEX NAME)



IT 348640-06-2P, 4-Bromo-1H-Pyrrolo[2,3-b]pyridine
640735-24-6P, 4-Bromo-1-(triisopropylsilyl)-1H-Pyrrolo[2,3-b]pyridine 640735-25-7P, 4-Fluoro-1-(triisopropylsilyl)-1H-Pyrrolo[2,3-b]pyridine
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(regioselective fluorination of 1H-pyrrolo[2,3-b]pyridine N-oxide by lithium-halogen exchange)
RN 348640-06-2 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 4-bromo- (CA INDEX NAME)

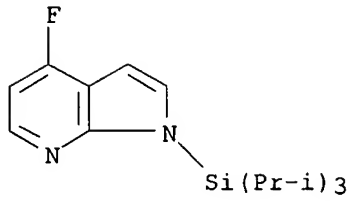


RN 640735-24-6 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 4-bromo-1-[tris(1-methylethyl)silyl]- (CA INDEX NAME)



RN 640735-25-7 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 4-fluoro-1-[tris(1-methylethyl)silyl]- (9CI)

(CA INDEX NAME)



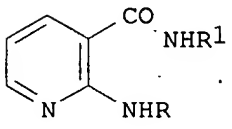
REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 12 OF 24 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:855655 HCAPLUS
DOCUMENT NUMBER: 139:350636
TITLE: Preparation of amino heteroaryl amides for use in pharmaceutical compositions for the treatment of angiogenesis mediated diseases such as cancer
INVENTOR(S): Patel, Vinod F.; Askew, Benny; Booker, Shon; Chen, Guoqing; Dipietro, Lucian V.; Germain, Julie; Habgood, Gregory J.; Huang, Qi; Kim, Tae-seong; Li, Aiwen; Nishimura, Nobuko; Nomak, Rana; Riahi, Babak; Yuan, Chester Chenguang; Elbaum, Daniel
PATENT ASSIGNEE(S): Amgen Inc., USA
SOURCE: U.S. Pat. Appl. Publ., 148 pp., Cont.-in-part of U.S. Ser. No. 46,622.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003203922	A1	20031030	US 2002-197918	20020717
US 7102009	B2	20060905		
US 2003195230	A1	20031016	US 2002-46622	20020110
US 7105682	B2	20060912		
CN 1538836	A	20041020	CN 2002-806467	20020111
ZA 2003005198	A	20040630	ZA 2003-5198	20030704
CA 2492045	A1	20040122	CA 2003-2492045	20030715
WO 2004007481	A2	20040122	WO 2003-US22275	20030715
WO 2004007481	A3	20040219		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003263784	A1	20040202	AU 2003-263784	20030715
EP 1562933	A2	20050817	EP 2003-764755	20030715
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2006502118	T	20060119	JP 2004-521922	20030715

US 2006194848 A1 20060831 US 2006-417329 20060502
PRIORITY APPLN. INFO.: US 2001-261882P P 20010112
US 2001-323808P P 20010919
US 2002-46622 A2 20020110
US 2002-197918 A 20020717
WO 2003-US22275 W 20030715

OTHER SOURCE(S): MARPAT 139:350636
GI



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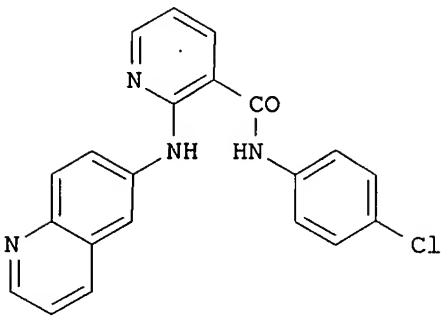
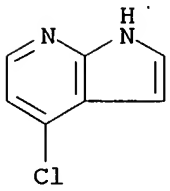


II

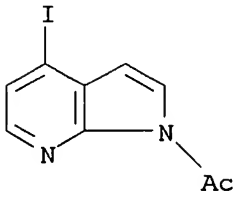
AB Amino substituted heteroaryl amides, such as I [R = nitrogen containing heteroaryl, such as quinolinyl, isoquinolinyl, indazolyl; R1 = aryl, cycloalkyl, heteroaryl, heterocyclyl], were prepared for therapeutic use. The invention encompasses novel compds., analogs, prodrugs and pharmaceutically acceptable salts thereof, pharmaceutical compns. and methods for prophylaxis and treatment of cancer, angiogenesis related disorders, KDR-related disorders, cell proliferation related disorders, inflammation, reducing blood flow in tumors, reducing tumor size and diabetic retinopathy. Thus, amide II was prepared via an amination reaction of 2-chloronicotinic acid with 6-aminoquinoline followed by an amidation reaction of the aminonicotinic acid derivative thus formed with 4-chloroaniline. Biol. evaluations included HUVEC proliferation assay, inhibition of angiogenesis in the rat corneal neovascularization micropocket model, and antitumor activity using A431 rat tumor cells.

IT 55052-28-3P, 4-Chloro-1H-pyrrolo[2,3-b]pyridine
443729-67-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of aminopyridinecarboxamides for therapeutic use in treatment of angiogenesis mediated diseases such as cancer)

RN 55052-28-3 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 4-chloro- (CA INDEX NAME)



RN 443729-67-7 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 1-acetyl-4-iodo- (9CI) (CA INDEX NAME)



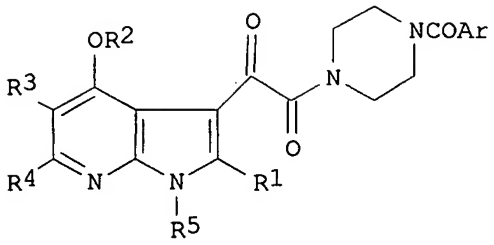
REFERENCE COUNT: 84 THERE ARE 84 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 13 OF 24 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:796491 HCAPLUS
DOCUMENT NUMBER: 139:307795
TITLE: Process for the preparation of antiviral 7-azaindole derivatives
INVENTOR(S): Benoit, Serge; Gingras, Stephane; Soundararajan, Nachimuthu
PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA
SOURCE: PCT Int. Appl., 47 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

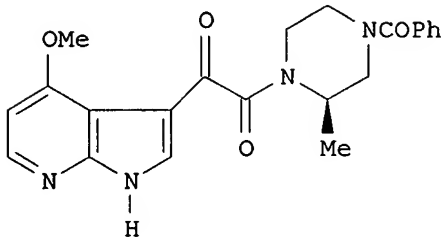
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003082289	A1	20031009	WO 2003-US9055	20030325
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2004044025	A1	20040304	US 2003-395320	20030324
US 6884889	B2	20050426		
AU 2003224760	A1	20031013	AU 2003-224760	20030325
EP 1487450	A1	20041222	EP 2003-721447	20030325
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
US 2005059695	A1	20050317	US 2004-948405	20040923
US 7105677	B2	20060912		

PRIORITY APPLN. INFO.:	US 2002-367401P	P 20020325
	US 2003-395320	A3 20030324
	WO 2003-US9055	W 20030325

OTHER SOURCE(S): CASREACT 139:307795; MARPAT 139:307795
GI



I



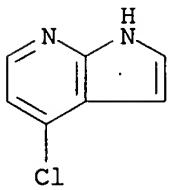
II

AB A process for the manufacture of azaindoles I [R1, R3, R4 = H, alkyl, alkenyl, cycloalkenyl, alkynyl, halogen, CN, Ph, acyl, (un)substituted CONH2, OH, SH, NH2; R2 = Me, Et, CH2CF3, Pr; R5 = H, alkyl, cycloalkyl, cyclolakenyl, CH2Ph, alkenyl, alkynyl, (un)substituted CONH2; Ar = (un)substituted Ph, pyridyl, furyl, thienyl; the piperazine ring may be further substituted] is described. The products are useful as therapeutic agents for the treatment of HIV and AIDS. Thus, 1H-pyrrolo[2,3-b]pyridine was oxidized with 3-ClC6H4CO2OH to its 7-oxide which was chlorinated with MeSO2Cl in MeCN to give 4-chloro-1H-pyrrolo[2,3-b]pyridine. This compound was converted to the 4-methoxy derivative by treatment with KOMe in PhMe and treated with ClCOCO2Me in presence of AlCl3 to give Me (4-methoxy-7-azaindol-3-yl)oxoacetate which was hydrolyzed to the acid and amidated with vilsmeier reagent and (R)-3-methyl-1-benzoylpiperazine to give the azaindole II.

IT 55052-28-3P
RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(process for the preparation of antiviral 7-azaindole derivs.)

RN 55052-28-3 HCAPLUS

CN 1H-Pyrrolo[2,3-b]pyridine, 4-chloro- (CA INDEX NAME)



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 14 OF 24 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:297060 HCAPLUS

10/ 502,538

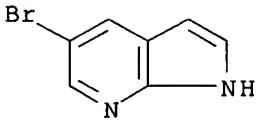
DOCUMENT NUMBER: 139:133381
TITLE: Synthesis of new melatonin analogues from dimers of azaindole and indole by use of Suzuki homocoupling
AUTHOR(S): Guillard, Jerome; Larraya, Carlos; Viaud-Massuard, Marie-Claude
CORPORATE SOURCE: EA 3247 GRCHT Laboratoire de Chimie Organique, UFR des Sciences Pharmaceutiques, Universite de Tours, Tours, 37200, Fr.
SOURCE: Heterocycles (2003), 60(4), 865-877
CODEN: HTCYAM; ISSN: 0385-5414
PUBLISHER: Japan Institute of Heterocyclic Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 139:133381
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB N-2-[3'-(2-Acetylaminoethyl)-1H,1'H-[5,5']biindol-3-yl]- and N-{2-[1'-(2-acetylaminoethyl)-1'H-[5,5'] biindol-1-yl]ethyl}acetamide (I; R2 = R4 = H, R3 = R5 = CH2CH2NHAc; R2 = R4 = CH2CH2NHAc, R3 = R5 = H; resp.) and their analogs in 7-azaindole series (II; R2 = R4 = Me, R3 = R5 = CH2CH2NHAc; R2 = R4 = CH2CH2NHAc, R3 = R5 = Me; resp.)were synthesized via Suzuki coupling reaction starting from indole or 7-azaindole using [1,1'-bis(diphenylphosphino)ferrocene] dichloropalladium as catalyst.

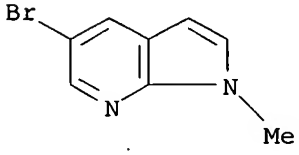
IT 183208-35-7P, 5-Bromo-7-azaindole
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(N-methylation of; preparation of melatonin analogs via palladium-catalyzed Suzuki homocoupling reactions of azaindole and indole dimers)

RN 183208-35-7 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 5-bromo- (CA INDEX NAME)

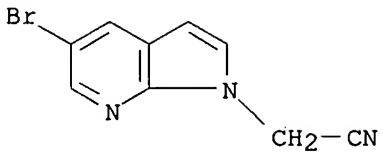


IT 183208-22-2P, 5-Bromo-1-methyl-7-azaindole 562823-31-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of melatonin analogs via palladium-catalyzed Suzuki homocoupling reactions of azaindole and indole dimers)

RN 183208-22-2 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 5-bromo-1-methyl- (9CI) (CA INDEX NAME)



RN 562823-31-8 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine-1-acetonitrile, 5-bromo- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 15 OF 24 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:120388 HCAPLUS
DOCUMENT NUMBER: 138:287200
TITLE: Comprehensive Studies on Dual Excitation Behavior of Double Proton versus Charge Transfer in 4-(N-Substituted amino)-1H-pyrrolo[2,3-b]pyridines
AUTHOR(S): Cheng, Chung-Chih; Chang, Chen-Pin; Yu, Wei-Shan; Hung, Fa-Tsai; Liu, Yun-I.; Wu, Guo-Ray; Chou, Pi-Tai
CORPORATE SOURCE: Department of Chemistry, Fu-Jen Catholic University, Taipei, Taiwan
SOURCE: Journal of Physical Chemistry A (2003), 107(10), 1459-1471
CODEN: JPCAFH; ISSN: 1089-5639
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 138:287200

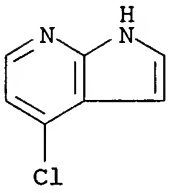
AB Comprehensive spectroscopic and dynamical studies on the dual excitation behavior of proton vs charge transfer for 4-(dimethylamino)-1H-pyrrolo[2,3-b]pyridine (DPP) and its related derivs. are reported. In cyclohexane, DPP dimer and/or dual hydrogen-bonded complex are formed with association consts. Ka as high as .apprx.4.2 + 103 and 5.2 + 104 M-1 (e.g., the DPP/acetic acid complex) at 298 K, resp., which upon electronic excitation undergo ultrafast rate (»6.7 + 1010 s-1) of double-proton transfer, resulting in a unique tautomer emission. Dual fluorescence was observed in polar, aprotic solvents, in which the large Stokes shifted emission band originates from the charge-transfer species incorporating a dimethylamine and pyridine ring as electron donor and acceptor, resp. Detailed solvent-polarity and temperature-dependent studies in combination with theor. approaches have been performed to determine the excited-state charge-transfer properties such as dipole moment, orbital configuration, etc. Supplementary support for the dual charge/proton-transfer behavior was provided by the comparative spectroscopy and dynamics of various DPP-related derivs. Further time-resolved measurements conclude that dual emissions share a common Franck-Condon excited state but undergo two independent relaxation channels. In protic solvents, such as ethanol, following fast solvent relaxation dynamics, the excited charge-transfer state further undergoes a solvent (i.e. alc.) assisted proton-transfer reaction. The charge vs. proton-transfer emission can be distinguished via the temporal spectral evolution. The results demonstrate DPP to be a unique model among 7-azaindole analogs in which the interplay between charge and proton-transfer reactions is operative in the excited state.

IT 55052-28-3P, 1H-Pyrrolo[2,3-b]pyridine,4-chloro-
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(dual excitation behavior of double proton vs. charge transfer in 4-(N-substituted amino)-1H-pyrrolo[2,3-b]pyridines)

RN 55052-28-3 HCAPLUS

10/ 502,538

CN 1H-Pyrrolo[2,3-b]pyridine, 4-chloro- (CA INDEX NAME)



REFERENCE COUNT: 81 THERE ARE 81 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

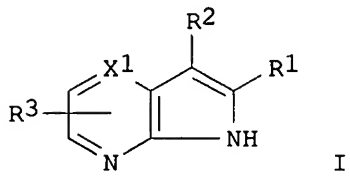
L6 ANSWER 16 OF 24 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:5957 HCAPLUS
DOCUMENT NUMBER: 138:55984
TITLE: Preparation of azaindoles as protein kinase inhibitors
INVENTOR(S): Cox, Paul Joseph; Majid, Tahir Nadeem; Lai, Justine Yeun Quai; Morley, Andrew; Amendola, Shelley; Deprets, Stephanie Daniele; Edlin, Chris; Gardner, Charles J.; Kominos, Dorothea; Pedgrift, Brian Leslie; Halley, Frank; Gillespy, Timothy Alan; Edwards, Michael; Clerc, Francois Frederic; Nemecek, Conception; Houille, Olivier; Damour, Dominique; Bouchard, Herve; Bezard, Daniel; Carrez, Chantal
PATENT ASSIGNEE(S): Aventis Pharma Limited, UK
SOURCE: PCT Int. Appl., 373 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003000688	A1	20030103	WO 2002-GB2799	20020620
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2451678	A1	20030103	CA 2002-2451678	20020620
EP 1397360	A1	20040317	EP 2002-730531	20020620
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
EE 200400015	A	20040415	EE 2004-15	20020620
BR 2002010507	A	20040615	BR 2002-10507	20020620
SI 21462	A	20041031	SI 2002-20015	20020620
JP 2004534826	T	20041118	JP 2003-507091	20020620
HU 200400247	A2	20050128	HU 2004-247	20020620
CN 1665809	A	20050907	CN 2002-812476	20020620
NZ 529205	A	20060428	NZ 2002-529205	20020620
US 2004053931	A1	20040318	US 2002-177804	20020621
US 6897207	B2	20050524		
ZA 2003009648	A	20050311	ZA 2003-9648	20031211

BG 108481	A	20050531	BG 2003-108481		20031219
US 2005267304	A1	20051201	US 2004-995103		20041123
PRIORITY APPLN. INFO.:			GB 2001-15109	A	20010621
			US 2001-300257P	P	20010622
			WO 2002-GB2799	W	20020620
			US 2002-177804	A1	20020621

OTHER SOURCE(S): MARPAT 138:55984

GI



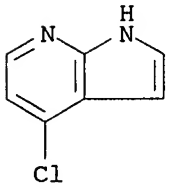
I

AB The invention is directed to physiol. active azaindoles (shown as I; variables defined below; e.g. 6-(5-methoxy-1-methyl-1H-indol-3-yl)-5H-pyrrolo[2,3-b]pyrazine) and compns. containing such compds.; and their prodrugs, and pharmaceutically acceptable salts and solvates of such compds. and their prodrugs. Such compds. and compns. have valuable pharmaceutical properties, in particular the ability to inhibit kinases, especially Syk, FAK, KDR, Aurora2 and IGF1R (data given in general rather than for specific I). Although the methods of preparation are not claimed, >100 example prepns. of intermediates and I are included. For I: R1 = aryl or heteroaryl each optionally substituted by ≥1 groups = alkylenedioxy, alkenyl, alkenyloxy, alkynyl, aryl, cyano, halo, hydroxy, heteroaryl, heterocycloalkyl, nitro, R4, -C(O)R, -C(O)OR5, -C(O)NY1Y2, -NY1Y2, -N(R6)C(O)R7, -N(R6)C(O)NY3Y4, -N(R6)C(O)OR7, -N(R6)SO2R7, -N(R6)SO2NY3Y4, -SO2NY1Y2 and -Z2R. R2 = H, acyl, cyano, halo, lower alkenyl, -Z2R4, -SO2NY3Y4, -NY1Y2 or lower alkyl optionally substituted by aryl, cyano, heteroaryl, heterocycloalkyl, hydroxy, -Z2R4, -C(O)NY1Y2, -C(O)R, -CO2R8, -NY3Y4, -N(R6)C(O)R, -N(R6)C(O)NY1Y2, -N(R6)C(O)OR7, -N(R6)SO2R7, -N(R6)SO2NY3Y4, -SO2NY1Y2 and ≥1 halogen atoms. R3 = H, aryl, cyano, halo, heteroaryl, lower alkyl, -Z2R4, -C(O)OR5 or -C(O)NY3Y4. R4 = alkyl, cycloalkyl, cycloalkylalkyl, heterocycloalkyl or heterocycloalkylalkyl each optionally substituted by aryl, cycloalkyl, cyano, halo, heteroaryl, heterocycloalkyl, -CHO (or a 5- 6- or 7-membered cyclic acetal derivative thereof), -C(O)NY1Y2, -C(O)OR5, -NY1Y2, -N(R6)C(O)R7, -N(R6)C(O)NY3Y4, -N(R6)SO2R7, -N(R6)SO2NY3Y4, -Z3R7 and ≥1 hydroxy, alkoxy and carboxy. R5 = H, alkyl, alkenyl, aryl, arylalkyl, heteroaryl or heteroarylalkyl. R6 = H or lower alkyl; R7 = alkyl, aryl, arylalkyl, cycloalkyl, cycloalkylalkyl, heteroaryl, heteroarylalkyl, heterocycloalkyl or heterocycloalkylalkyl; R8 = H or lower alkyl. R = aryl or heteroaryl; alkenyl; or alkyl, cycloalkyl, cycloalkylalkyl, heterocycloalkyl or heterocycloalkylalkyl each optionally substituted by aryl, cycloalkyl, cyano, halo, heteroaryl, heterocycloalkyl, -CHO (or a 5- 6- or 7-membered cyclic acetal derivative thereof), -C(O)NY1Y2, -C(O)OR5, -NY1Y2, -N(R6)C(O)R7, -N(R6)C(O)NY3Y4, -N(R6)SO2R7, -N(R6)SO2NY3Y4, -Z3R7 and ≥1 hydroxy, alkoxy and carboxy. X1 = N, CH, C-aryl, C-heteroaryl, C-heterocycloalkyl, C-heterocycloalkenyl, C-halo, C-CN, C-R4, CNY1Y2, COH, CZ2R, CC(O)R, CC(O)OR5, CC(O)NY1Y2, CN(R8)C(O)R, CN(R6)C(O)OR7, CN(R6)C(O)NY3Y4, CN(R6)SO2NY3Y4, CN(R6)SO2R, CSO2NY3Y4, C-NO2, or C-alkenyl or C-alkynyl optionally substituted by ≥1 aryl, cyano, halo, hydroxy, heteroaryl, heterocycloalkyl, nitro, -C(O)NY1Y2, -C(O)OR5, -NNY1Y2, -N(R6)C(O)R7, -N(R6)C(O)NY3Y4, -N(R6)C(O)OR7, -N(R6)SO2R7, -N(R6)SO2NY3Y4, -SO2NY1Y2 and -Z2R4. Y1 and Y2 = H, alkenyl, aryl, cycloalkyl, heteroaryl or alkyl optionally substituted by ≥1 aryl, halo, heteroaryl,

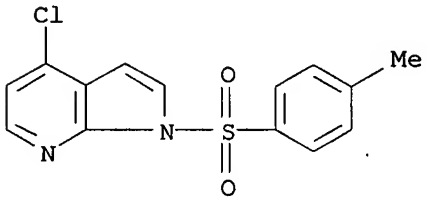
heterocycloalkyl, hydroxy, -C(O)NY3Y4, -C(O)OR5, NY3Y4, -N(R6)C(O)R7, -N(R6)C(O)NY3Y4, -N(R6)SO2R7, -N(R6)SO2NY3Y4 and -OR7, or the group -NY1Y2 may form a cyclic amine. Y3 and Y4 = H, alkenyl, alkyl, aryl, arylalkyl, cycloalkyl, heteroaryl or heteroarylalkyl; or the group -NY3Y4 may form a cyclic amine; Z1 = O or S; Z2 = O or S(O)n; Z3 = O, S(O)n, NR6; n = 0-2.

IT 55052-28-3P, 4-Chloro-1H-pyrrolo[2,3-b]pyridine
348640-05-1P, 4-Chloro-1-(toluene-4-sulfonyl)-1H-pyrrolo[2,3-b]pyridine 479552-71-1P, 5-Bromo-1-(toluene-4-sulfonyl)-1H-pyrrolo[2,3-b]pyridine
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of azaindoles as protein kinase inhibitors with therapeutic uses)

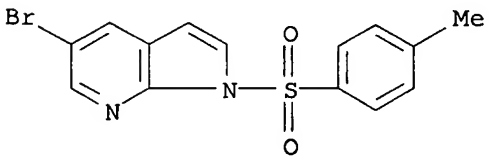
RN 55052-28-3 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 4-chloro- (CA INDEX NAME)



RN 348640-05-1 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 4-chloro-1-[(4-methylphenyl)sulfonyl]- (9CI) (CA INDEX NAME)



RN 479552-71-1 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 5-bromo-1-[(4-methylphenyl)sulfonyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 17 OF 24 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:489395 HCAPLUS
DOCUMENT NUMBER: 135:92651
TITLE: Preparation of azaindoles as protein kinase inhibitors
INVENTOR(S): Cox, Paul Joseph; Majid, Tahir Nadeem; Lai, Justine

Yeun Quai; Morley, Andrew David; Amendola, Shelley; Deprets, Stephanie; Edlin, Chris
PATENT ASSIGNEE(S): Aventis Pharma Ltd., UK
SOURCE: PCT Int. Appl., 270 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001047922	A2	20010705	WO 2000-GB4993	20001227
WO 2001047922	A3	20020117		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
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EP 1263759	A2	20021211	EP 2000-985695	20001227
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BR 2000017038	A	20030107	BR 2000-17038	20001227
HU 200203895	A2	20030228	HU 2002-3895	20001227
EE 200200343	A	20030616	EE 2002-343	20001227
JP 2003519144	T	20030617	JP 2001-549392	20001227
NZ 519121	A	20040528	NZ 2000-519121	20001227
AU 777717	B2	20041028	AU 2001-22094	20001227
CN 1615873	A	20050518	CN 2004-10078969	20001227
ZA 2002004126	A	20030825	ZA 2002-4126	20020523
BG 106836	A	20030430	BG 2002-106836	20020618
NO 2002003032	A	20020621	NO 2002-3032	20020621
US 2004009983	A1	20040115	US 2002-178667	20020624
US 6770643	B2	20040803		
US 2004198737	A1	20041007	US 2004-827978	20040420
NO 2006006017	A	20020621	NO 2006-6017	20061227

PRIORITY APPLN. INFO.:

GB 1999-30698	A	19991224
US 2000-215818P	P	20000705
WO 2000-GB4993	W	20001227
US 2002-178667	A3	20020624

OTHER SOURCE(S): MARPAT 135:92651
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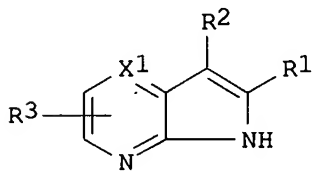


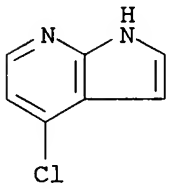
I

AB The invention is directed to compns. containing physiol. active compds. of general formula [I; wherein R1 is (un)substituted aryl or heteroaryl; R2 represents hydrogen, acyl, cyano, halo, lower alkenyl or lower alkyl

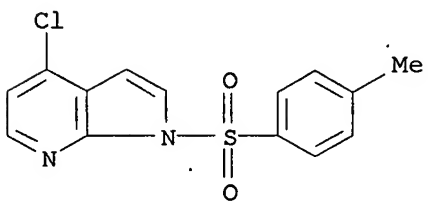
optionally substituted by a substituent selected from cyano, heteroaryl, heterocycloalkyl, -Z1R8, -CONY3Y4,-CO2R8,-NY3Y4, -N(R6)COR7, -N(R6)CONY3Y4, -N(R6)CO2R7, -N(R6)SO2R7, -N(R6)SO2NY3Y4 and one or more halogen atoms; R3 represents hydrogen, aryl, cyano, halo, heteroaryl, lower alkyl, -CO2R5 or -CONY3Y4; and X1 represents N, CH, C-halo, C-CN, C-R7, C-NY3Y4, C-OH, C-Z2R7, C-CO2R5, C-CONY3Y4, C-N(R8)COR7, C-SO2NY3Y4, C-N(R8)SO2R7, C-alkenyl, C-alkynyl or C-NO2; wherein R5 represents hydrogen, alkyl, alkenyl, aryl, arylalkyl, heteroaryl or heteroarylalkyl; R6 represents hydrogen or lower alkyl; R7 represents alkyl, aryl, arylalkyl, cycloalkyl, cycloalkylalkyl, heteroaryl, heteroarylalkyl, heterocycloalkyl or heterocycloalkylalkyl; R8 represents hydrogen or lower alkyl; represents; Y3 and Y4 are independently hydrogen, alkenyl, alkyl, aryl, arylalkyl, cycloalkyl, heteroaryl or heteroarylalkyl; or the group -NY3Y4 may form a cyclic amine; Z1 represents O or S; Z2 represents O or S(O)n; n is zero or an integer 1 or 2] and their prodrugs, and pharmaceutically acceptable salts and solvates of such compds. and their prodrugs. These compds. have valuable pharmaceutical properties, in particular the ability to inhibit protein kinases, especially Syk kinase, and are useful for the treatment of asthma, psoriasis, joint inflammation, and inflammatory bowel disease. Thus, a stirred solution of diisopropylamine (59.9 mL) in THF (1,400 mL), at -15 °C and under nitrogen, was treated with a solution of n-butyllithium in hexanes (131 mL, 1.6 M) over 25 min at <-10°. After stirring for 30 min the mixture was treated with methylpyrazine (26.8 g) over 15 min, then stirred for 1 h and then treated with a solution of 5-methoxy-1-methyl-1H-indole-3-carbonitrile (53 g) in THF (600 mL) over 1 h at <-10°, and the reaction mixture was allowed to warm to room temperature over 2 h and then stood overnight to give, after workup and flash chromatog., 6-(5-Methoxy-1-methyl-1H-indol-3-yl)-5H-pyrrolo[2,3-b]pyrazine (19.4 g) as a gray solid. I showed IC50 of 10-100 nM against Syk kinase.

IT 55052-28-3P 348640-05-1P 348640-07-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation of azaindoles as protein kinase inhibitors)

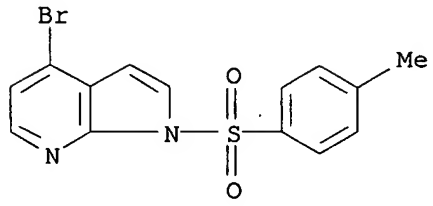
RN 55052-28-3 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 4-chloro- (CA INDEX NAME)



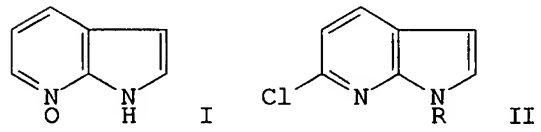
RN 348640-05-1 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 4-chloro-1-[(4-methylphenyl)sulfonyl]- (9CI) (CA INDEX NAME)



RN 348640-07-3 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 4-bromo-1-[(4-methylphenyl)sulfonyl]- (CA INDEX NAME)



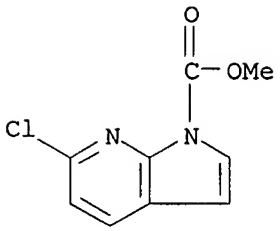
L6 ANSWER 18 OF 24 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1992:571266 HCAPLUS
DOCUMENT NUMBER: 117:171266
TITLE: Regioselective functionalization of 1H-pyrrolo[2,3-b]pyridine via its N-oxide
AUTHOR(S): Minakata, Satoshi; Komatsu, Mitsuo; Ohshiro, Yoshiki
CORPORATE SOURCE: Fac. Eng., Osaka Univ., Suita, 565, Japan
SOURCE: Synthesis (1992), (7), 661-3
CODEN: SYNTBF; ISSN: 0039-7881
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 117:171266
GI



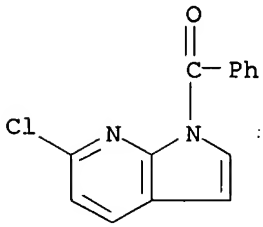
AB Selective functionalization of 1H-pyrrolo[2,3-b]pyridine (7-azaindole) at the 6-position was achieved by Reissert-Henze type reaction. Thus, the title oxide (I) was treated with BzCl and hexamethyldisilazane in THF to give 60% the benzoylbromopyrropyridine II (R = Bz), which was treated with 1 N NaOH in MeOH to give II (R = H). Similarly, other halo (Br, iodo), cyano and thiocyanato groups were directly introduced onto the pyridine ring of 7-azaindole.

IT 143468-07-9P 143468-11-5P 143468-12-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and hydrolysis of)

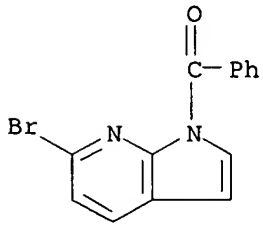
RN 143468-07-9 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine-1-carboxylic acid, 6-chloro-, methyl ester (9CI) (CA INDEX NAME)



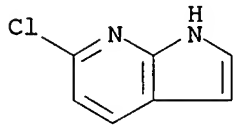
RN 143468-11-5 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 1-benzoyl-6-chloro- (9CI) (CA INDEX NAME)



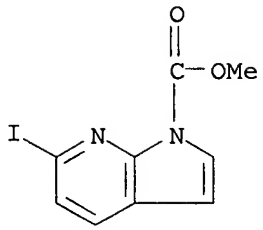
RN 143468-12-6 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 1-benzoyl-6-bromo- (9CI) (CA INDEX NAME)



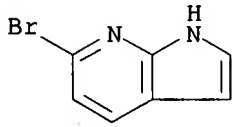
IT 55052-27-2P 143468-10-4P 143468-13-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 55052-27-2 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 6-chloro- (9CI) (CA INDEX NAME)



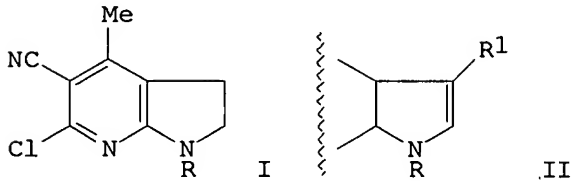
RN 143468-10-4 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine-1-carboxylic acid, 6-iodo-, methyl ester (9CI)
(CA INDEX NAME)



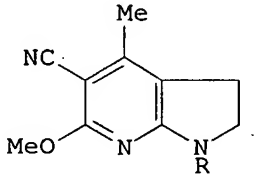
RN 143468-13-7 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 6-bromo- (CA INDEX NAME)



L6 ANSWER 19 OF 24 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1988:5881 HCAPLUS
DOCUMENT NUMBER: 108:5881
TITLE: Azaindole derivatives. 9. Reactions of 5-cyano-7-chloro-7-azaindoles and lactam-lactim tautomerism of 5-cyano-6-hydroxy-7-azaindolines
AUTHOR(S): Sycheva, T. V.; Rubtsov, N. M.; Sheinker, Yu. N.; Yakhontov, L. N.
CORPORATE SOURCE: Vses. Nauchno-Issled. Khim.-Farm. Inst., Moscow, 119021, USSR
SOURCE: Khimiya Geterotsiklicheskikh Soedinenii (1987), (1), 100-6
CODEN: KGSSAQ; ISSN: 0453-8234
DOCUMENT TYPE: Journal
LANGUAGE: Russian
OTHER SOURCE(S): CASREACT 108:5881
GI



I II



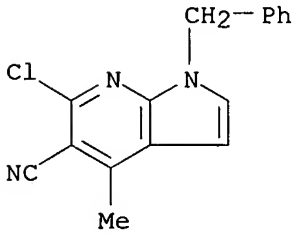
III

AB Oxidation of azaindoles I (R = PhCH2, Bu) by MnO2 gave 71 and 66% azaindoles II (R1 = H); methoxylation of I by NaOMe-MeOH gave 73 and 71% azaindoles III. Bromination II (R = PhCH2) gave 69% II (R1 = Br), acetylation gave 74% II (R = Ac), and Mannich reactions with appropriate amines gave 30 and 24% II (R1 = Me2NCH2, 4-methyl-1-piperazinylmethyl).

IT 111837-80-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and substitution reactions of)

RN 111837-80-0 HCAPLUS

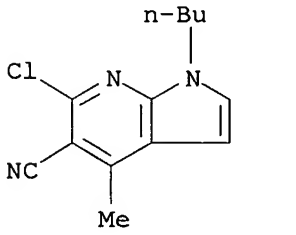
CN 1H-Pyrrolo[2,3-b]pyridine-5-carbonitrile, 6-chloro-4-methyl-1-(phenylmethyl)- (9CI) (CA INDEX NAME)



IT 111837-81-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 111837-81-1 HCAPLUS

CN 1H-Pyrrolo[2,3-b]pyridine-5-carbonitrile, 1-butyl-6-chloro-4-methyl- (9CI) (CA INDEX NAME)



L6 ANSWER 20 OF 24 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1980:568162 HCAPLUS

DOCUMENT NUMBER: 93:168162

TITLE: Synthesis of 4-amino-1H-pyrrolo[2,3-b]pyridine (1,7-dideazaadenine) and 1H-pyrrolo[2,3-b]pyridin-4-ol (1,7-dideazahypoxanthine)

AUTHOR(S): Schneller, Stewart W.; Luo, Jiann-Kuan

CORPORATE SOURCE: Dep. Chem., Univ. South Florida, Tampa, FL, 33620, USA

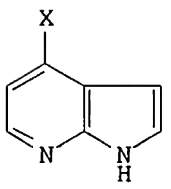
SOURCE: Journal of Organic Chemistry (1980), 45(20), 4045-8
CODEN: JOCEAH; ISSN: 0022-3263

DOCUMENT TYPE: Journal

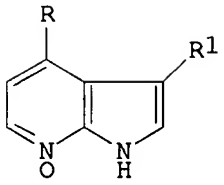
LANGUAGE: English

OTHER SOURCE(S): CASREACT 93:168162

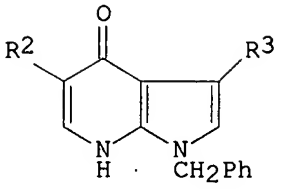
GI



I



II



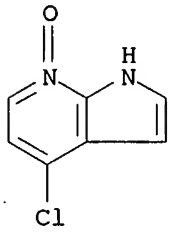
III

AB 4-Amino-1H-pyrrolo[2,3-b]pyridine (1,7-dideazaadenine) (I; X = NH2) was prepared by the Fe-HOAc reduction of 4-nitro-1H-pyrrolo[2,3-b]pyridine 7-oxide (II; R = NO2, R1 = H), obtained by nitration of 1H-pyrrolo[2,3-b]pyridine-3-carboxamide 7-oxide (II; R = H, R1 = CONH2). Other nitration reactions in the 1H-pyrrolo[2,3-b]pyridine 7-oxide series are disclosed. The preparation of 1H-pyrrolo[2,3-b]pyridin-4-ol (1,7-dideazahypoxanthine) (I; X = OH) began with the hydrolysis of Et 1-benzyl-3-cyano-4-oxo-4,7-dihydro-1H-pyrrolo[2,3-b]pyridine-5-carboxylate (III; R2 = CO2Et, R3 = CN) to the 3,5-dicarboxylic acid derivative (III; R2 = R3 = CO2H) of 1-benzyl-4-oxo-4,7-dihydro-1H-pyrrolo[2,3-b]pyridine. Decarboxylation of III (R2 = R3 = CO2H) with subsequent debenzylation formed I (X = OH).

IT 74420-03-4P 74420-04-5P 74420-05-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

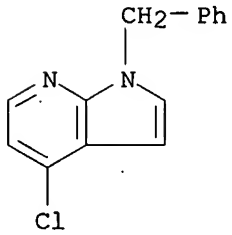
RN 74420-03-4 HCAPLUS

CN 1H-Pyrrolo[2,3-b]pyridine, 4-chloro-, 7-oxide (9CI) (CA INDEX NAME)



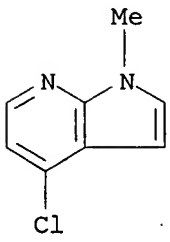
RN 74420-04-5 HCAPLUS

CN 1H-Pyrrolo[2,3-b]pyridine, 4-chloro-1-(phenylmethyl)- (9CI) (CA INDEX NAME)

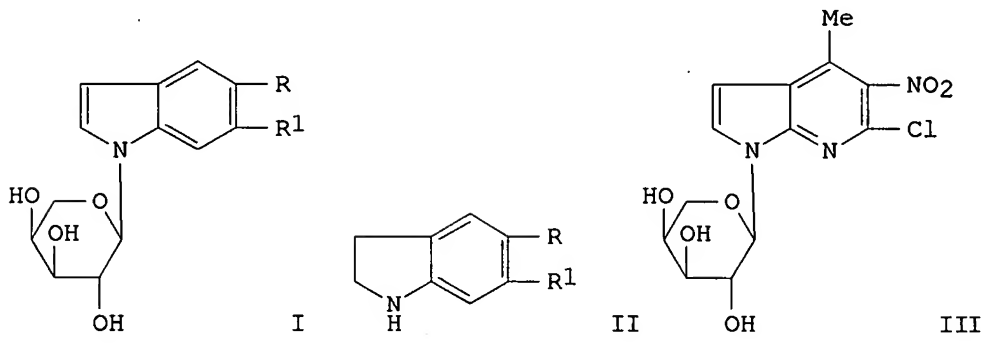


RN 74420-05-6 HCAPLUS

CN 1H-Pyrrolo[2,3-b]pyridine, 4-chloro-1-methyl- (9CI) (CA INDEX NAME)



L6 ANSWER 21 OF 24 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1980:6855 HCAPLUS
DOCUMENT NUMBER: 92:6855
TITLE: Synthesis and study of the biological activity of indole nucleosides. IV. Synthesis of 1-α-L-arabinopyranosides of substituted indoles and 7-azaindoles
AUTHOR(S): Mukhanov, V. I.; Sokolova, T. N.; Nikolaeva, T. G.; Dobrynin, Ya. V.; Preobrazhenskaya, M. N.
CORPORATE SOURCE: Onkol. Nauchn. Tsentr., Moscow, USSR
SOURCE: Khimiko-Farmatsevticheskii Zhurnal (1979), 13(6), 47-57
CODEN: KHFZAN; ISSN: 0023-1134
DOCUMENT TYPE: Journal
LANGUAGE: Russian
GI



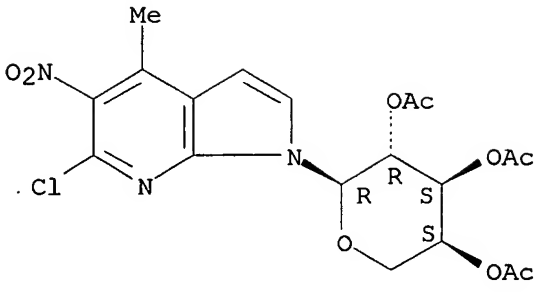
AB Indole nucleosides I (R = Ac, Br, R1 = H; R = Br, R1 = NO2) were obtained in 50.3-94.2% yields by glycosidation of II with L-arabinose, dehydrogenation with MnO2, followed by hydrolysis. Analogously obtained was 88.9% azaindole nucleoside III. I showed some cytostatic properties.

IT 72159-76-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and hydrolysis of)

RN 72159-76-3 HCAPLUS

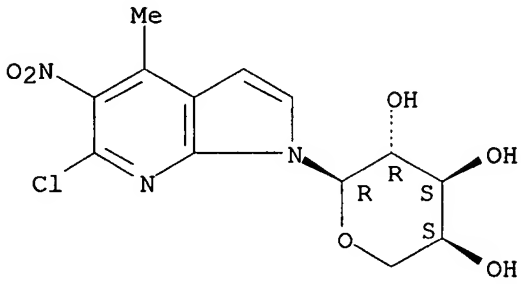
CN 1H-Pyrrolo[2,3-b]pyridine, 6-chloro-4-methyl-5-nitro-1-(2,3,4-tri-O-acetyl-α-L-arabinopyranosyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

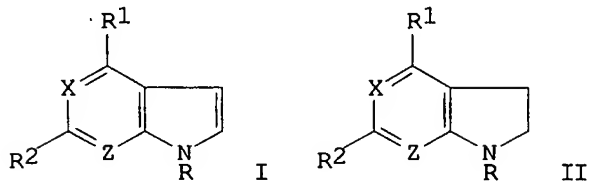


IT 72159-77-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 72159-77-4 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 1-α-L-arabinopyranosyl-6-chloro-4-methyl-5-nitro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L6 ANSWER 22 OF 24 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1979:405132 HCAPLUS
DOCUMENT NUMBER: 91:5132
TITLE: Azaindole derivatives. 57. Dehydrogenation of substituted 5- and 7-azaindolines activated by manganese dioxide
AUTHOR(S): Azimov, V. A.; Krasnokutskaya, D. M.; Palant, I. N.; Yakhontov, L. N.
CORPORATE SOURCE: Vses. Nauchno-Issled. Khim.-Farm. Inst., Moscow, USSR
SOURCE: Khimiya Geterotsiklicheskikh Soedinenii (1979), (3), 375-8
CODEN: KGSSAQ; ISSN: 0453-8234
DOCUMENT TYPE: Journal
LANGUAGE: Russian
OTHER SOURCE(S): CASREACT 91:5132
GI

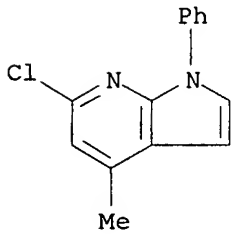


AB Azaindoles I (X = CH, N; Z = N, CH, CCN; R = Ph, H, Ac, PhCH2; R1 = Me, H, R2 = Cl, OH, H, Et2NCH2CH2O) were prepared by dehydrogenation of the corresponding II with activated MnO2. Oxidation-reduction potentials were determined

IT 5912-17-4P 70357-62-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

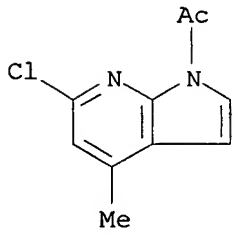
RN 5912-17-4 HCAPLUS

CN 1H-Pyrrolo[2,3-b]pyridine, 6-chloro-4-methyl-1-phenyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



RN 70357-62-9 HCAPLUS

CN 1H-Pyrrolo[2,3-b]pyridine, 1-acetyl-6-chloro-4-methyl- (9CI) (CA INDEX NAME)



L6 ANSWER 23 OF 24 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1978:7279 HCAPLUS

DOCUMENT NUMBER: 88:7279

TITLE: Synthesis of 2,3-dioxo-2,3-dihydro-4-methyl-6-chloro-1H-pyrrolo[2,3-b]pyridine and its 1-α-L-arabinopyranoside

AUTHOR(S): Ektova, L. V.; Miniker, T. D.; Yartseva, I. V.; Preobrazhenskaya, M. N.

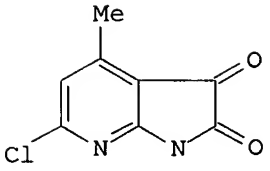
CORPORATE SOURCE: Onkol. Nauchn. Tsentr., Moscow, USSR

SOURCE: Khimiya Geterotsiklicheskikh Soedinenii (1977), (8), 1083-6
CODEN: KGSSAQ; ISSN: 0453-8234

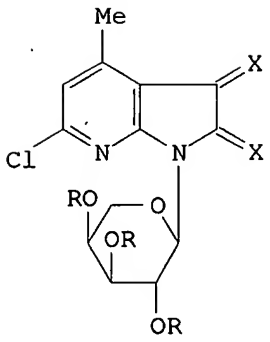
DOCUMENT TYPE: Journal

LANGUAGE: Russian

GI



I



II

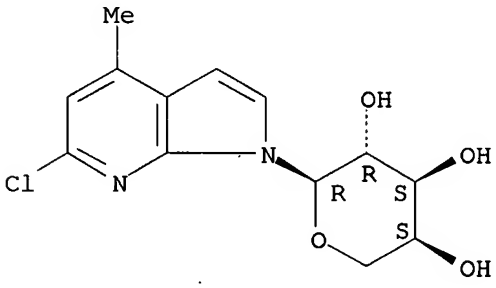
AB The title compound I was obtained in 8.2% yield by oxidation of 4-methyl-6-chloro-7-azaindole with CrO3. Treatment of 4-methyl-6-chloro-7-azaindoline with L-arabinose gave II (X = H2, R = H) which was acetylated, dehydrogenated, and oxidized by CrO3 to give 40% II (X = O, R = Ac).

IT 64842-62-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 64842-62-2 HCAPLUS

CN 1H-Pyrrolo[2,3-b]pyridine, 1-α-L-arabinopyranosyl-6-chloro-4-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

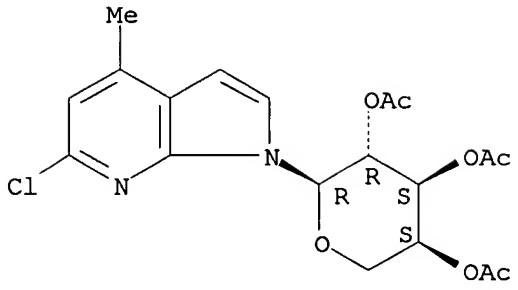


IT 64842-61-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation, hydrolysis, and oxidation of)

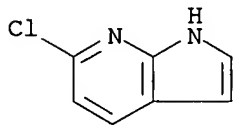
RN 64842-61-1 HCAPLUS

CN 1H-Pyrrolo[2,3-b]pyridine, 6-chloro-4-methyl-1-(2,3,4-tri-O-acetyl-α-L-arabinopyranosyl)- (9CI) (CA INDEX NAME)

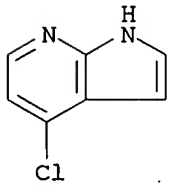
Absolute stereochemistry.



L6 ANSWER 24 OF 24 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1975:72820 HCAPLUS
DOCUMENT NUMBER: 82:72820
TITLE: Diazaindenes (azaindoles). VI. Preparation and properties of 1,7-diazaindene 7-oxide and 6,7,8,9-tetrahydro-γ-carboline 2- oxide
AUTHOR(S): Clark, Bernard A. J.; Parrick, John
CORPORATE SOURCE: Sch. Chem., Brunel Univ., Uxbridge, UK
SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1974), (19), 2270-4
CODEN: JCPRB4; ISSN: 0300-922X
DOCUMENT TYPE: Journal
LANGUAGE: English
GI For diagram(s), see printed CA Issue.
AB Oxidation of N-acetyl-1,7-diazaindene and -6,7,8,9,-tetrahydro-γ-carboline gave oxides I and II, resp., which with Ac2O gave ketones III and IV, resp., after hydrolysis. I and II with POCl3 followed by alkaline hydrolysis gave chloro compds. V and VI, resp. II with AgCN-BzCl and PhNCO in DMF gave carbonitrile VII and carboline VIII, resp.
IT 55052-27-2P 55052-28-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 55052-27-2 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 6-chloro- (9CI) (CA INDEX NAME)



RN 55052-28-3 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 4-chloro- (CA INDEX NAME)



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     FILE 'REGISTRY' ENTERED AT 14:05:58 ON 05 APR 2007
L1             STRUCTURE UPLOADED
L2          328 S L1 FUL
L3             STRUCTURE UPLOADED
L4           59 S L3 FUL

     FILE 'HCAPLUS' ENTERED AT 14:07:22 ON 05 APR 2007
L5           94 S L2/P
L6           24 S L5 AND (OXID?)/AB,BI

=> s l4/p
L7           32 L4/P

=> s l7 and l5
L8           18 L7 AND L5

=> s l8 1- ibib abs hitstr
MISSING OPERATOR L8 1-
The search profile that was entered contains terms or
nested terms that are not separated by a logical operator.

=> d l8 1- ibib abs hitstr
YOU HAVE REQUESTED DATA FROM 18 ANSWERS - CONTINUE? Y/(N):y

L8   ANSWER 1 OF 18  HCAPLUS  COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:         2007:175696  HCAPLUS
DOCUMENT NUMBER:          146:251742
TITLE:                    Preparation of aryl and heteroaryl sulfonamides as
                          CCR2 antagonists
INVENTOR(S):              Ungashe, Solomon; Wei, Zheng; Basak, Arindrajit;
                          Charvat, Trevor T.; Chen, Wei; Jin, Jeff; Moore,
                          Jimmie; Zeng, Yibin; Punna, Sreenivas; Dairaghi,
                          Daniel; Hansen, Derek; Pennell, Andrew M. K.; Wright,
                          John J.
PATENT ASSIGNEE(S):       USA
SOURCE:                   U.S. Pat. Appl. Publ., 263pp., Cont.-in-part of U.S.
                          Ser. No. 332,786.
                          CODEN: USXXCO
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   2
PATENT INFORMATION:

     PATENT NO.           KIND   DATE        APPLICATION NO.          DATE
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     US 2007037794         A1    20070215    US 2006-486974           20060714
     US 2006173019         A1    20060803    US 2006-332786           20060113
PRIORITY APPLN. INFO.:                       US 2005-644103P      P   20050114
                                             US 2005-742821P      P   20051206
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                                             US 2006-332786       A2  20060113
OTHER SOURCE(S):          MARPAT 146:251742
GI
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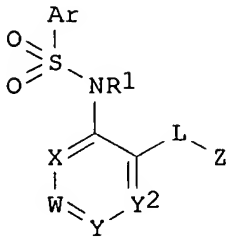

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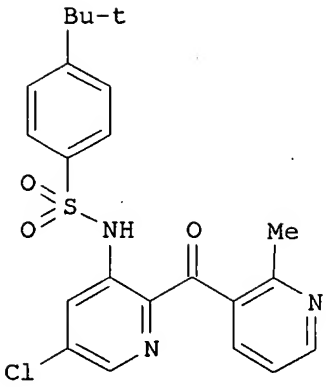


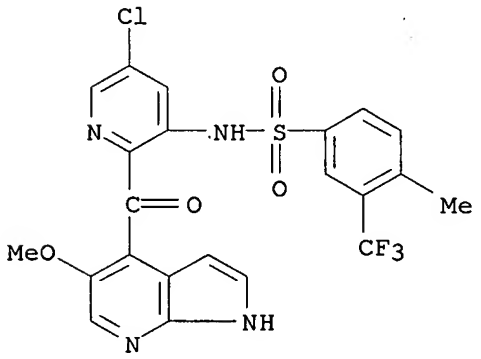
II

AB Title compds. I [Ar = (un)substituted aryl or heteroaryl; R1 = H, (un)substituted alkyl, alkenyl, etc.; X, W, and Y independently = CR2, N, and N(=O), where each occurrence of R2 independently = CN, CHO, CO2H, alkylcarbonyl, etc.; Y2 = N or N(=O); L = bond, O, S, SO, etc.; Z = (un)substituted aryl, heteroaryl, heterocyclyl, etc.], are prepared and disclosed as potent antagonists of the CCR2 receptor. Thus, reduction of 2-bromo-5-chloro-3-nitropyridine, reaction of the amine with 4-tert-butylbenzenesulfonyl chloride, alkylation with chloromethyl Me ether and treatment with N-methoxy-2-methyl-N-methylnicotinamide gave sulfonamide II. Numerous compds. of the invention demonstrated IC50 values < 500 nM in assays for CCR2 activity. Animal testing demonstrates that these compds. are useful for treating inflammation, a hallmark disease for CCR2. The compds. are generally aryl sulfonamide derivs. and are useful in pharmaceutical compns., methods for the treatment of CCR2-mediated diseases, and as controls in assays for the identification of CCR2 antagonists.

IT 926004-72-0P, N-[5-Chloro-2-[(5-methoxy-1H-pyrrolo[2,3-b]pyridin-4-yl)carbonyl]pyridin-3-yl]-4-methyl-3-trifluoromethylbenzenesulfonamide
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(drug candidate; preparation of heteroaryl sulfonamides as CCR2 receptor antagonists)

RN 926004-72-0 HCAPLUS

CN INDEX NAME NOT YET ASSIGNED



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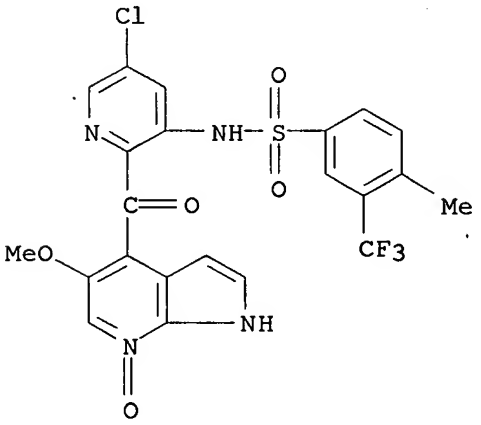
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU

(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; preparation of heteroaryl sulfonamides as CCR2 receptor antagonists)

RN 926004-79-7 HCAPLUS
CN INDEX NAME NOT YET ASSIGNED



IT 685513-98-8P 926004-73-1P 926004-74-2P
926004-75-3P 926004-76-4P 926004-77-5P
926004-78-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation of heteroaryl sulfonamides as CCR2 receptor antagonists)

RN 685513-98-8 HCAPLUS
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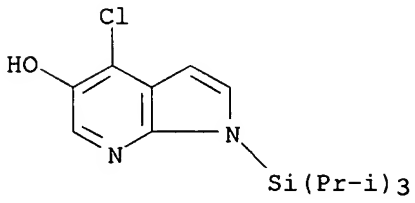

RN 926004-73-1 HCAPLUS
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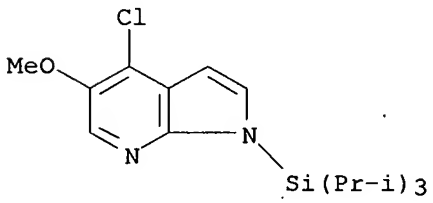

RN 926004-74-2 HCAPLUS

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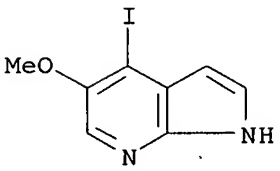

RN 926004-75-3 HCAPLUS
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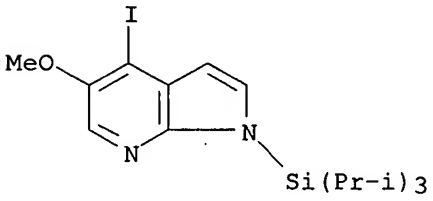

RN 926004-76-4 HCAPLUS
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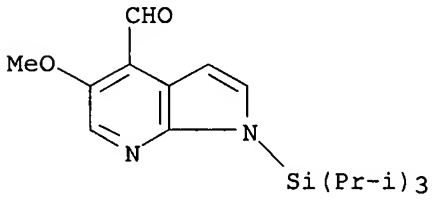
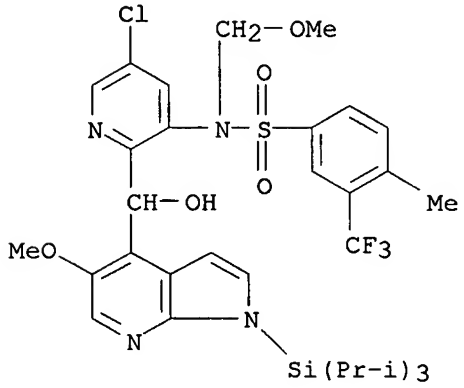
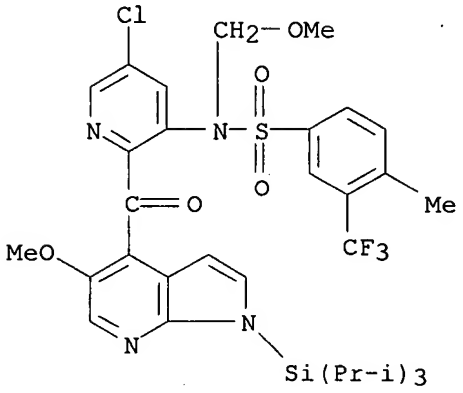


RN 926004-77-5 HCAPLUS
CN INDEX NAME NOT YET ASSIGNED



RN 926004-78-6 HCAPLUS
CN Benzenesulfonamide, N-[5-chloro-2-[[5-methoxy-1-[tris(1-methylethyl)silyl]-

1H-pyrrolo[2,3-b]pyridin-4-yl]carbonyl]-3-pyridinyl]-N-(methoxymethyl)-4-methyl-3-(trifluoromethyl)- (CA INDEX NAME)



L8 ANSWER 2 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:	2007:11341 HCAPLUS
DOCUMENT NUMBER:	146:121941
TITLE:	Pyrrolo[2,3-b]pyridine derivatives as protein kinase inhibitors and their preparation, pharmaceutical compositions and use in the treatment of diseases
INVENTOR(S):	Ibrahim, Prabha N.; Artis, Dean R.; Bremer, Ryan; Habets, Gaston; Mamo, Shumeye; Nespi, Marika; Zhang, Chao; Zhang, Jiazhong; Zhu, Yong-Liang; Zuckerman, Rebecca; West, Brian; Suzuki, Yoshihisa; Tsai, James; Hirth, Klaus-Peter; Bollag, Gideon; Spevak, Wayne; Cho, Hanna; Gillette, Samuel J.; Wu, Guoxian; Zhu, Hongyao; Shi, Shenghua
PATENT ASSIGNEE(S):	Plexxikon, Inc., USA
SOURCE:	PCT Int. Appl., 631 pp. CODEN: PIXXD2
DOCUMENT TYPE:	Patent
LANGUAGE:	English
FAMILY ACC. NUM. COUNT:	3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007002433	A1	20070104	WO 2006-US24524	20060621

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.:	US 2005-692960P	P	20050622
	US 2005-731528P	P	20051028
OTHER SOURCE(S):	MARPAT 146:121941		

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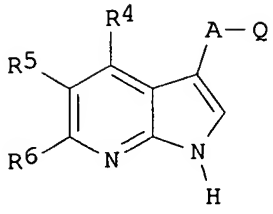

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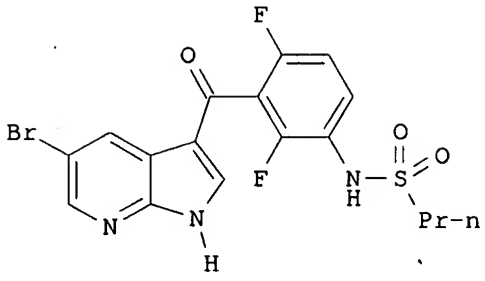

II

AB Compds. of formula I which are active on protein kinases are described, as well as methods of using such compds. to treat diseases and conditions associated with aberrant activity of protein kinases. Compds. of formula I wherein Q is (un)substituted aryl, (un)substituted indole, (un)substituted heteroaryl, etc.; A is O, S, (un)substituted methylene, NH and derivs., CO, CS, SO and SO2; R4 - R6 is H, halo, (un)substituted lower alkyl, (un)substituted lower alkenyl, (un)substituted alkynyl, (un)substituted (hetero)cycloalkyl, and (un)substituted (hetero)aryl; and their pharmaceutically acceptable salts, prodrugs, tautomers, and isomers thereof, are claimed. Example compound II was prepared by carboxylation of 2,4-difluoroaniline with benzyl chloroformate; the resulting benzyl 3-amino-2,6-difluorobenzoate underwent sulfonylation with propane-1-sulfonyl chloride to give benzyl 2,6-difluoro-3-(propylsulfonylamino)benzoate, which underwent hydrogenation to give the corresponding benzoic acid, which underwent chlorination, to give the corresponding acid chloride, which underwent reaction with 5-bromo-7-azaindole to give compound II. All the invention compds. were evaluated for their protein kinase inhibitory activity. Several of the tested compds. exhibited good protein kinase inhibitory activity against several kinases.

IT 55052-28-3P 183208-35-7P 866319-00-8P
866546-07-8P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(drug candidate; preparation of pyrrolopyridine derivs. as protein kinase inhibitors useful in treatment of diseases)

RN 55052-28-3 HCAPLUS
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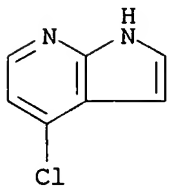

RN 183208-35-7 HCAPLUS
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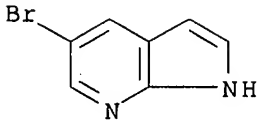
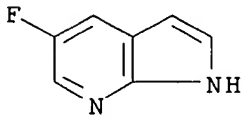


RN 866319-00-8 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 5-fluoro- (9CI) (CA INDEX NAME)



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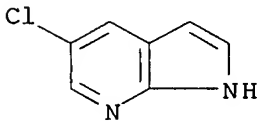

IT 348640-06-2P
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(drug candidate; preparation of pyrrolopyridine derivs. as protein kinase inhibitors useful in treatment of diseases)
RN 348640-06-2 HCAPLUS
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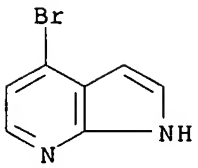

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918523-59-8P 918523-68-9P 918523-69-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation of pyrrolopyridine derivs. as protein kinase inhibitors useful in treatment of diseases)
RN 143468-13-7 HCAPLUS
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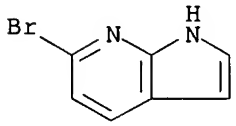

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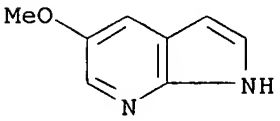

RN 858116-66-2 HCAPLUS
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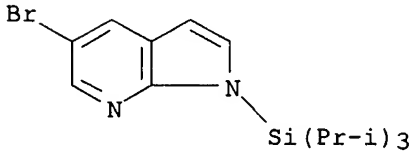

RN 918523-59-8 HCAPLUS
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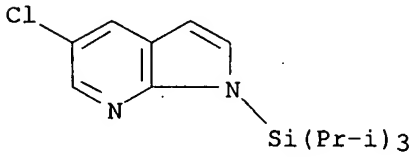

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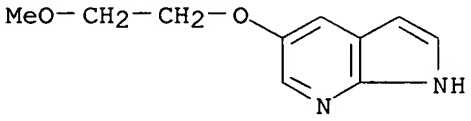

RN 918523-69-0 HCAPLUS
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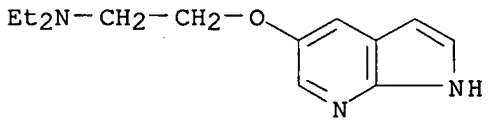


REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 3 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2007:11300 HCAPLUS
DOCUMENT NUMBER: 146:142627

10/ 502,538

TITLE: Pyrrolo[2,3-b]pyridine derivatives as protein kinase inhibitors and their preparation, pharmaceutical compositions and use in the treatment of diseases

INVENTOR(S): Ibrahim, Prahbha N.; Artis, Dean R.; Bremer, Ryan; Mamo, Shumeye; Nespi, Marika; Zhang, Chao; Zhang, Jiazhong; Zhu, Yong-Liang; Tsai, James; Hirth, Klaus-Peter; Bollag, Gideon; Spevak, Wayne; Cho, Hanna; Gillette, Samuel J.; Wu, Guoxiam; Zhu, Hongyao; Shi, Shenghua

PATENT ASSIGNEE(S): Plexxikon, Inc., USA

SOURCE: PCT Int. Appl., 291 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007002325	A1	20070104	WO 2006-US24361	20060621

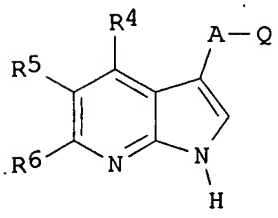
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: US 2005-692960P P 20050622
US 2005-731528P P 20051028

OTHER SOURCE(S): MARPAT 146:142627

GI



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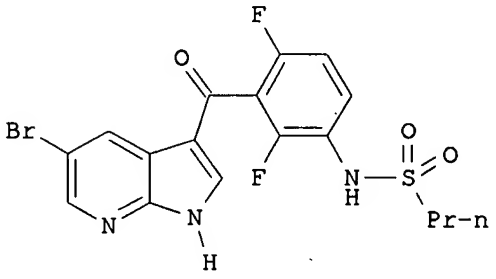


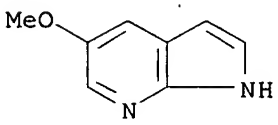
II

AB Compds. of formula I which are active on protein kinases are described, as well as methods of using such compds. to treat diseases and conditions associated with aberrant activity of protein kinases. Compds. of formula I wherein Q is (un)substituted (hetero)aryl, and (un)substituted indole; A is O, S, (un)substituted methylene, NH and derivs., CO, CS, SO and SO2; R4 - R6 are independently H, halo, (un)substituted lower alkyl, (un)substituted lower alkenyl, (un)substituted lower alkynyl, (un)substituted (hetero)cycloalkyl, (un)substituted (hetero)aryl, etc.;

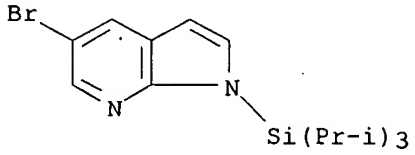
and their pharmaceutically acceptable salts, prodrugs, tautomer, and isomers thereof, are claimed. Example compound II was prepared by carboxylation of 2,4-difluoroaniline with benzyl chloroformate; the resulting benzyl 3-amino-2,6-difluorobenzoate underwent sulfonylation with propane-1-sulfonyl chloride to give benzyl 2,6-difluoro-3-(propylsulfonylamino)benzoate, which underwent hydrolysis to give the corresponding benzoic acid, which underwent chlorination and coupling with 5-bromo-7-azaindole to give compound II. All the invention compds. were evaluated for their protein kinase inhibitory activity. Several of the invention compds. exhibited good inhibitory activity against various protein kinases.

IT 183208-36-8P 858116-66-2P 866319-00-8P
866546-07-8P 918523-59-8P 918523-68-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation of pyrrolopyridine derivs. as protein kinase inhibitors useful in treatment of diseases)

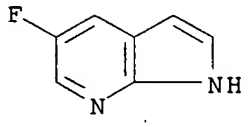
RN 183208-36-8 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 5-methoxy- (CA INDEX NAME)



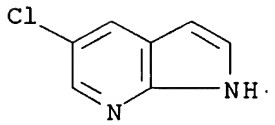
RN 858116-66-2 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 5-bromo-1-[tris(1-methylethyl)silyl]- (CA INDEX NAME)



RN 866319-00-8 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 5-fluoro- (9CI) (CA INDEX NAME)

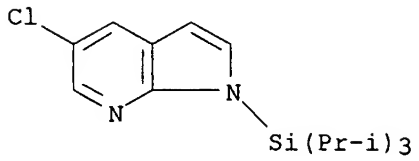


RN 866546-07-8 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 5-chloro- (CA INDEX NAME)

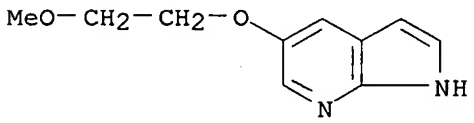


RN 918523-59-8 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 5-chloro-1-[tris(1-methylethyl)silyl]- (CA

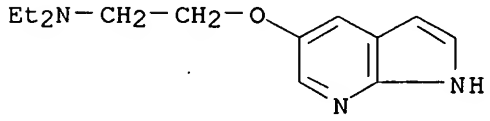
INDEX NAME)



RN 918523-68-9 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 5-(2-methoxyethoxy)- (CA INDEX NAME)



IT 918523-69-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(starting material, intermediate; preparation of pyrrolopyridine derivs. as protein kinase inhibitors useful in treatment of diseases)
RN 918523-69-0 HCAPLUS
CN Ethanamine, N,N-diethyl-2-(1H-pyrrolo[2,3-b]pyridin-5-yloxy)- (CA INDEX NAME)



REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

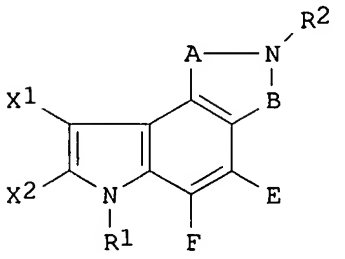
L8 ANSWER 4 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:1286251 HCAPLUS
DOCUMENT NUMBER: 146:45727
TITLE: Preparation of novel multicyclic compounds and their amino acid derivatives as inhibitors of enzymes such as poly(ADP-ribose) polymerase
INVENTOR(S): Chatterjee, Sankar; Diebold, James L.; Dunn, Derek; Hudkins, Robert L.; Dandu, Reddeppareddy; Wells, Gregory J.; Zulli, Allison L.
PATENT ASSIGNEE(S): Cephalon, Inc., USA
SOURCE: U.S. Pat. Appl. Publ., 93pp., Cont.-in-part of U.S. Ser. No. 850,858.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2006276497	A1	20061207	US 2006-455356	20060619
US 2002028815	A1	20020307	US 2001-850858	20010508

US 7122679	B2	20061017		
AT 315039	T	20060215	AT 2001-935215	20010509
ES 2256238	T3	20060716	ES 2001-1935215	20010509
EP 1754707	A2	20070221	EP 2005-76862	20010509
EP 1754707	A3	20070228		
R: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE, TR				
ZA 2002009065	A	20040209	ZA 2002-9065	20021107
PRIORITY APPLN. INFO.:			US 2000-202947P	P 20000509
			US 2001-850858	A2 20010508
			EP 2001-935215	A3 20010509

OTHER SOURCE(S): MARPAT 146:45727

GI



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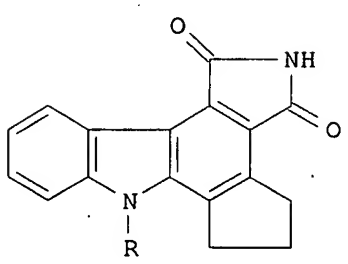


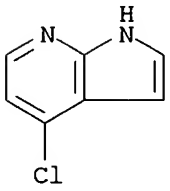
II

AB The title compds. such as pyrrolo[3,4-c]carbazoles, furo[3,2-a]pyrrolo[3,4-c]carbazoles, 4,5,6,7-tetrahydro-1H-cyclopenta[a]pyrrolo[3,4-c]carbazoles 4,5,6,7-tetrahydro-1H-cyclopenta[g]pyrido[2,3-b]pyrrolo[3,4-e]indoles derivs. [I; A, B = CO, CH(OR3), CH(SR3), CH2, CHR3, CHR3CHR4, CR3R4, CONR3, SO, SO2; R3, R4 = independently H, lower alkyl; ECCF = C4 to C7 cycloalkyl optionally substituted with at least one substituent J; J = independently at each occurrence J3-(J2)n-(J1)m; n, m = independently 0-1; J1, J2 = independently aryl/lower alkyl/carbonyl; carbonyloxy, amino, guanidino, (un)protected amino acid, etc.; J3 = H, halo, OH, SH, CN, NO2, lower alkyl, aryloxycarbonyl, etc.; R1, R2 = independently H, formyl, acetyl, lower alkylsulfonyl, (un)substituted lower alkyl, lower alkanoyl, etc.; X1CCX2 = (un)substituted hetero/aryl] are prepared I are effective in the treatment of diseases or disease states related to the activity of enzymes such as poly(ADP-ribose) polymerase (PARP), vascular endothelial growth factor receptor kinase (VEGFR2 kinase), and MLK3 kinase (a member of the mixed lineage kinase family), including, for example, traumatic central nervous system injuries, neurodegenerative diseases (in particular Parkinson's, Huntington's, or Alzheimer's disease), inflammation, cerebral or cardiac ischemia, endotoxic shock, diabetes, or cellular proliferative disorders (in particular cancer, solid tumors, diabetic retinopathy, intraocular neovascular syndromes, macular degeneration, rheumatoid arthritis, psoriasis, or endometriosis). I also suppress the formation of blood vessels (angiogenesis) and prevent neuronal degradation associated with traumatic central nervous system injuries. Thus, 2H-1,3,4,5,6,7-hexahydrocyclopenta[a]pyrrolo[3,4-c]carbazole-1,3-dione (II; R = H) (preparation given) was treated with NaH in DMF at room temperature for 30 min and reacted with a stirred mixture of Boc-Lys(Boc)-OH dicyclohexylamine salt, TBTU, N-Methylmorpholine, and DMF at room temperature for 1 h, followed by treatment of the product with 4 N HCl in dioxane to give II (R = H-Lys). II (R = H-Lys) showed IC50 of 22 nM against PARP.

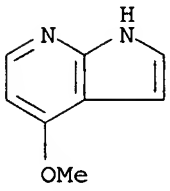
IT 55052-28-3P, 4-Chloro-7-azaindole 122379-63-9P, 4-Methoxy-7-azaindole 916574-87-3P, 1-Phenylsulfonyl-4-methoxy-7-azaindole

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of novel multicyclic compds. and their amino acid derivs. as inhibitors of enzymes for treatment of diseases related to enzymes such as poly(ADP-ribose) polymerase, VEGFR2 kinase, and MLK3 kinase)

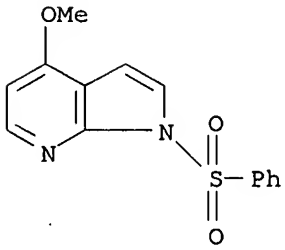
RN 55052-28-3 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 4-chloro- (CA INDEX NAME)



RN 122379-63-9 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 4-methoxy- (CA INDEX NAME)



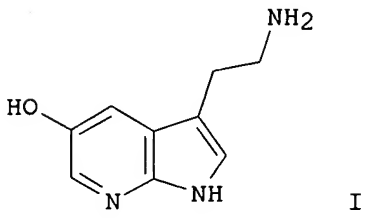
RN 916574-87-3 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 4-methoxy-1-(phenylsulfonyl)- (CA INDEX NAME)



L8 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:	2006:1106239 HCAPLUS
DOCUMENT NUMBER:	146:62508
TITLE:	Synthesis of 7-Azaserotonin: Its Photophysical Properties Associated with Excited State Proton Transfer Reaction
AUTHOR(S):	Wu, Pei-Wen; Hsieh, Wan-Ting; Cheng, Yi-Ming; Wei, Ching-Yen; Chou, Pi-Tai
CORPORATE SOURCE:	Department of Chemistry, National Taiwan University, Taipei, 106, Taiwan
SOURCE:	Journal of the American Chemical Society (2006), 128(45), 14426-14427 CODEN: JACSAT; ISSN: 0002-7863
PUBLISHER:	American Chemical Society

DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 146:62508
GI

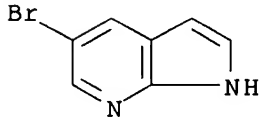


I

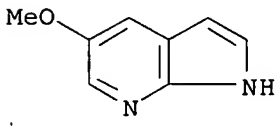
AB The synthesis of 3-(2-aminoethyl)-5-ol-1H-pyrrolo[2,3-b]pyridine I (7-azaserotonin), which may potentially serve as an agonist or antagonist of serotonin receptors (no data), is reported. In alcs., the solvent (e.g., ethanol) catalyzed proton-transfer reaction takes place for I in the excited state, resulting in dual emission. Conversely, excited-state deprotonation takes place in neutral aqueous solution The unique excitation behavior makes 7-azaserotonin versatile as a potential bioprobe.

IT 183208-35-7P 183208-36-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of 7-azaserotonin and its photophys. properties associated with excited state proton transfer reaction)

RN 183208-35-7 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 5-bromo- (CA INDEX NAME)



RN 183208-36-8 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 5-methoxy- (CA INDEX NAME)



REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

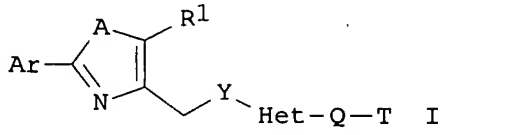
L8 ANSWER 6 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:718537 HCAPLUS
DOCUMENT NUMBER: 141:225495
TITLE: Preparation of oxazole derivatives as PPAR agonists
INVENTOR(S): Su, Wei-Guo; Zehnder, Luke Raymond; Skalitzky, Donald James
PATENT ASSIGNEE(S): Pfizer Inc., USA
SOURCE: PCT Int. Appl., 76 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004074284	A1	20040902	WO 2004-IB338	20040209
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2516475	A1	20040902	CA 2004-2516475	20040209
EP 1597257	A1	20051123	EP 2004-709295	20040209
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2004007735	A	20060214	BR 2004-7735	20040209
JP 2006518366	T	20060810	JP 2006-502422	20040209
US 2004209929	A1	20041021	US 2004-783654	20040219
NL 1025542	A1	20040824	NL 2004-1025542	20040220
NL 1025542	C2	20051011		

PRIORITY APPLN. INFO.: US 2003-448931P P 20030221
WO 2004-IB338 W 20040209

OTHER SOURCE(S): MARPAT 141:225495
GI



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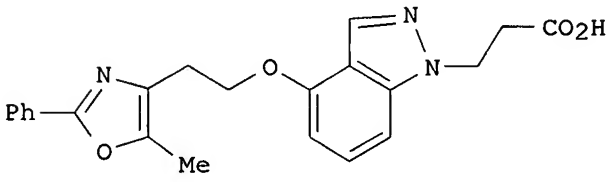


II

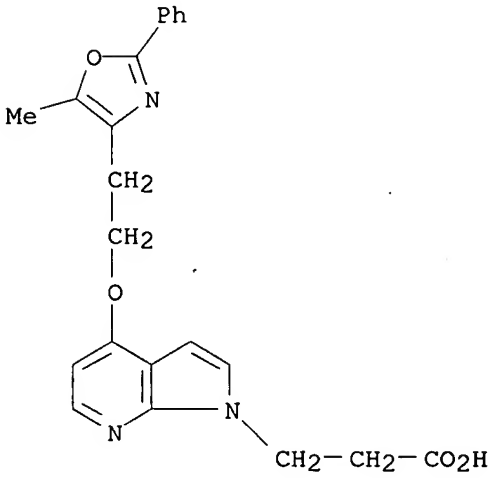
AB The title compds. I [wherein Ar = (un)substituted (hetero)cyclyl or (hetero)aryl; A = CH2, NH, O, or S; R1 = (un)substituted alkyl, cycloalkyl, heterocyclyl, or (hetero)aryl; Y = -(CH2)n-, -(CH2)nNR15-, -(CH2)nO-, or -(CH2)nS-; n = 0-3; R15 = H, alkyl, cyclyalkyl, etc.; Het = (un)substituted heteroaryl; Q = (un)substituted alkylene, etc.; T = thiazolidinyl, tetrazolyl, (un)substituted CO2H, etc.] or pharmaceutically acceptable salts thereof are prepared for treating peroxisome proliferator-activated receptors (PPAR) related disorders, such as diabetes, dyslipidemia, obesity, and inflammatory disorders. For example, the compound II was prepared in a multi-step synthesis. Some of compds. I inhibited human PPAR with Ki of <1 μM.

IT 748154-22-5P 748154-23-6P 748154-24-7P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of oxazole derivs. as PPAR agonists)

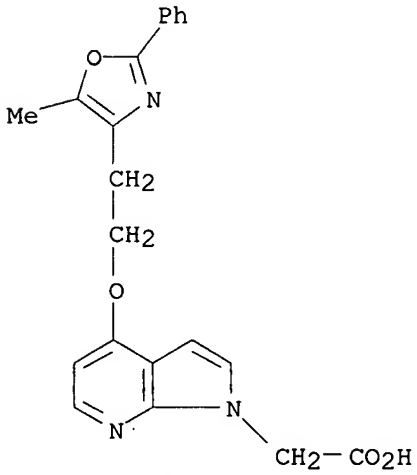
RN 748154-22-5 HCAPLUS

CN 1H-Pyrrolo[2,3-b]pyridine-1-propanoic acid, 4-[2-(5-methyl-2-phenyl-4-oxazolyl)ethoxy]- (9CI) (CA INDEX NAME)



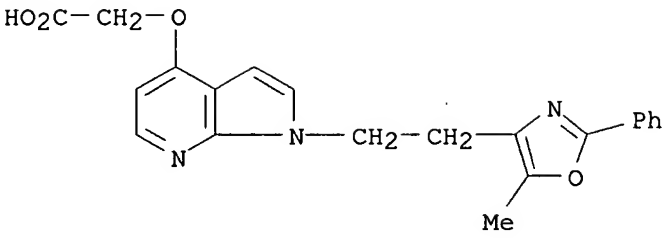
RN 748154-23-6 HCAPLUS

CN 1H-Pyrrolo[2,3-b]pyridine-1-acetic acid, 4-[2-(5-methyl-2-phenyl-4-oxazolyl)ethoxy]- (9CI) (CA INDEX NAME)

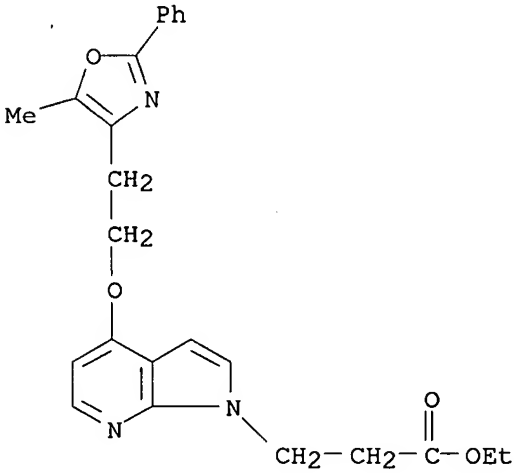


RN 748154-24-7 HCAPLUS

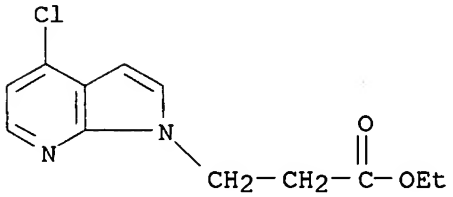
CN Acetic acid, [[1-[2-(5-methyl-2-phenyl-4-oxazolyl)ethyl]-1H-pyrrolo[2,3-b]pyridin-4-yl]oxy]- (9CI) (CA INDEX NAME)



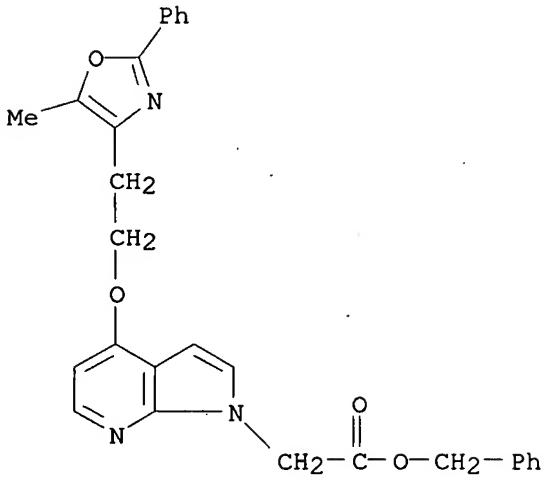
IT 748154-43-0P 748154-44-1P 748154-45-2P
748154-46-3P 748154-47-4P 748154-48-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation of oxazole derivs. as PPAR agonists)
RN 748154-43-0 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine-1-propanoic acid, 4-[2-(5-methyl-2-phenyl-4-oxazolyl)ethoxy]-, ethyl ester (9CI) (CA INDEX NAME)



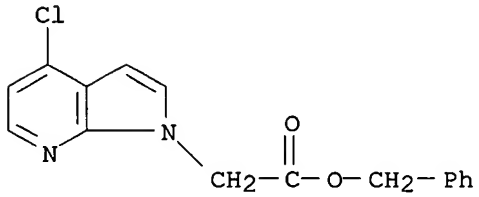
RN 748154-44-1 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine-1-propanoic acid, 4-chloro-, ethyl ester (9CI) (CA INDEX NAME)



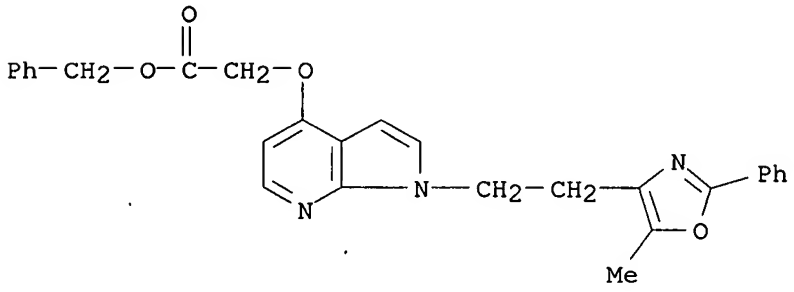
RN 748154-45-2 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine-1-acetic acid, 4-[2-(5-methyl-2-phenyl-4-oxazolyl)ethoxy]-, phenylmethyl ester (9CI) (CA INDEX NAME)



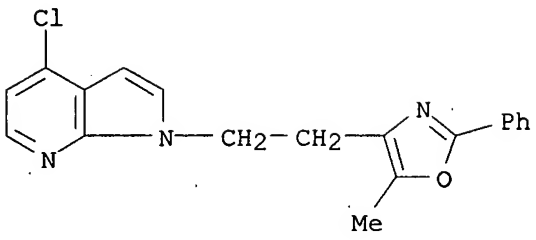
RN 748154-46-3 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine-1-acetic acid, 4-chloro-, phenylmethyl ester (9CI) (CA INDEX NAME)



RN 748154-47-4 HCAPLUS
CN Acetic acid, [[1-[2-(5-methyl-2-phenyl-4-oxazolyl)ethyl]-1H-pyrrolo[2,3-b]pyridin-4-yl]oxy]-, phenylmethyl ester (9CI) (CA INDEX NAME)



RN 748154-48-5 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 4-chloro-1-[2-(5-methyl-2-phenyl-4-oxazolyl)ethyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

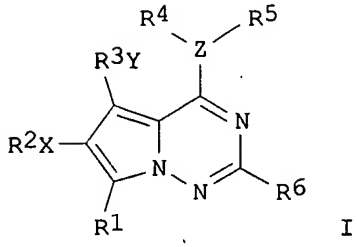
L8 ANSWER 7 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:80698 HCAPLUS
DOCUMENT NUMBER: 140:146173
TITLE: Preparation of pyrrolotriazines as selective VEGFR-2 and FGFR-1 kinase inhibitors for treatment of proliferative diseases
INVENTOR(S): Bhide, Rajeev; Ruel, Rejean; Thibeault, Carl; L'heureux, Alexandre
PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA
SOURCE: PCT Int. Appl., 66 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004009601	A1	20040129	WO 2003-US22554	20030718
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2492665	A1	20040129	CA 2003-2492665	20030718
AU 2003254017	A1	20040209	AU 2003-254017	20030718
US 2004063707	A1	20040401	US 2003-622593	20030718
US 6969717	B2	20051129		
US 2004072832	A1	20040415	US 2003-623171	20030718
US 6869952	B2	20050322		
EP 1539763	A1	20050615	EP 2003-765754	20030718
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
CN 1681818	A	20051012	CN 2003-821820	20030718
CN 1681508	A	20051012	CN 2003-821915	20030718
JP 2005538990	T	20051222	JP 2004-523591	20030718
CN 1903840	A	20070131	CN 2006-10115789	20030721
US 2005124621	A1	20050609	US 2005-35248	20050113
NO 2005000417	A	20050217	NO 2005-417	20050125
US 2006058304	A1	20060316	US 2005-214267	20050829
PRIORITY APPLN. INFO.:			US 2002-397256P P	20020719
			US 2003-447213P P	20030213

US 2003-622280 A 20030718
US 2003-622593 A3 20030718
US 2003-623171 A1 20030718
WO 2003-US22554 W 20030718
CN 2003-816201 A3 20030721

OTHER SOURCE(S): MARPAT 140:146173

GI



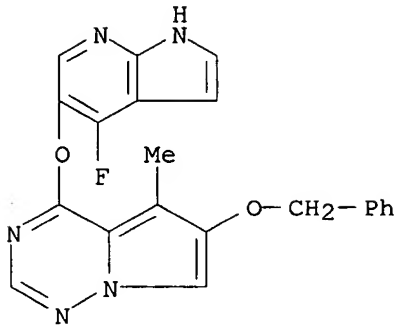
I

AB Title compds. I [Z = O, S, N, etc.; X, Y = O, OCO, S, etc.; R1 = H, CH3, OH, etc.; R2, R3 = H, (un)substituted alkyl, alkenyl etc.; R4 = (un)substituted 7-azaindolyl, e.g., F, Cl, Me; R5 = H, absent when Z = O, S; R6 = H, (un)substituted alkyl, aryl, etc.] and their pharmaceutically acceptable salts were prepared For example, electrophilic substitution of compound I [R1 = H; R2X = benzyloxy; R3Y = CH3; ZR5R6 = Cl] with 4-fluoro-5-hydroxy-7-azaindole, e.g., prepared from 4-chloro-1H-pyrrolo[2,3-b]pyridine in 6-steps, afforded compound I [R1 = H; R2X = benzyloxy; R3Y = CH3; ZR5R6 = 4-fluoro-7-azaindol-5-yloxy] in 80% yield. In VEGFR-2 and FGFR-1 kinase assays, 38-examples of compds. I exhibited IC50 values ranging from 0.001-10 μM. Of note, pyrrolotriazines I exhibited selective VEGFR-2 and FGFR-1 kinase inhibition (no data provided). Compds. I are claimed useful for the treatment of cancer, inflammation, autoimmune diseases.

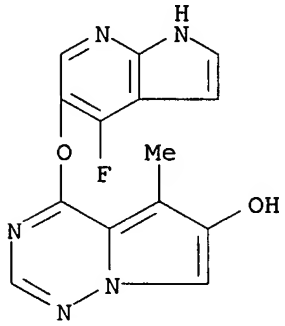
IT 651743-86-1P 651743-87-2P 651743-88-3P
651743-89-4P 651743-92-9P 651743-93-0P
651743-94-1P 651743-96-3P 651743-97-4P
651743-99-6P 651744-01-3P 651744-02-4P
651744-03-5P 651744-05-7P 651744-06-8P
651744-09-1P 651744-10-4P 651744-11-5P
651744-12-6P 651744-52-4P 651744-55-7P
651744-56-8P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of pyrrolotriazines as selective VEGFR-2 and FGFR-1 kinase inhibitors for treatment of proliferative diseases)

RN 651743-86-1 HCAPLUS

CN Pyrrolo[2,1-f][1,2,4]triazine, 4-[(4-fluoro-1H-pyrrolo[2,3-b]pyridin-5-yl)oxy]-5-methyl-6-(phenylmethoxy)- (9CI) (CA INDEX NAME)

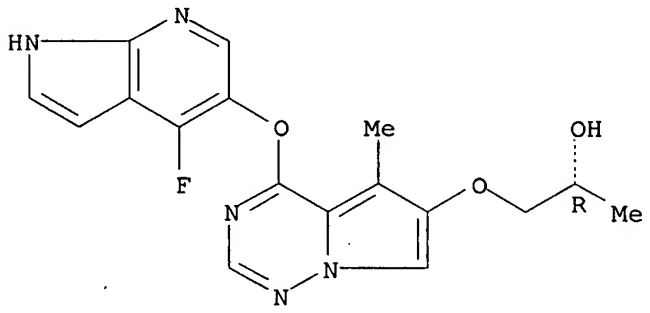


RN 651743-87-2 HCAPLUS
CN Pyrrolo[2,1-f][1,2,4]triazin-6-ol, 4-[(4-fluoro-1H-pyrrolo[2,3-b]pyridin-5-yl)oxy]-5-methyl- (9CI) (CA INDEX NAME)



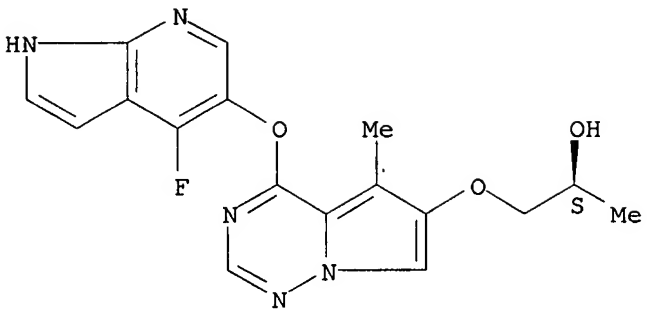
RN 651743-88-3 HCAPLUS
CN 2-Propanol, 1-[[4-[(4-fluoro-1H-pyrrolo[2,3-b]pyridin-5-yl)oxy]-5-methylpyrrolo[2,1-f][1,2,4]triazin-6-yl]oxy]-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



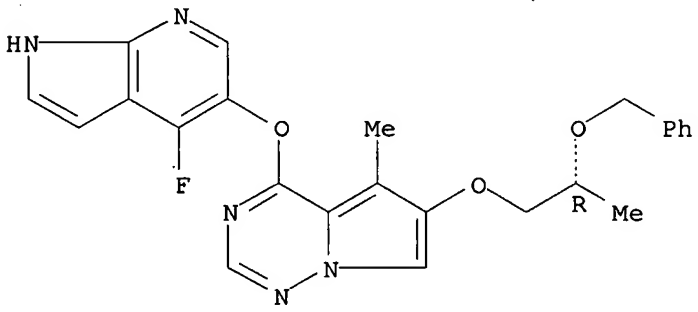
RN 651743-89-4 HCAPLUS
CN 2-Propanol, 1-[[4-[(4-fluoro-1H-pyrrolo[2,3-b]pyridin-5-yl)oxy]-5-methylpyrrolo[2,1-f][1,2,4]triazin-6-yl]oxy]-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



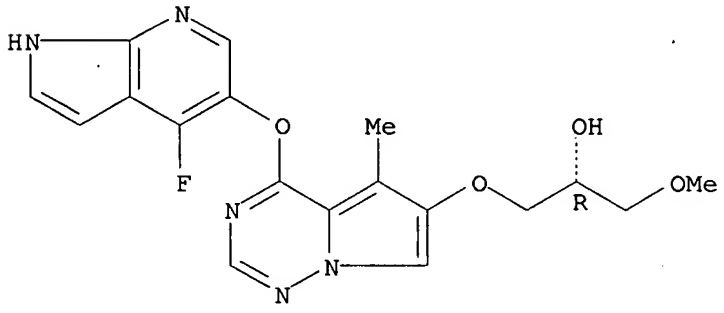
RN 651743-92-9 HCAPLUS
CN Pyrrolo[2,1-f][1,2,4]triazine, 4-[(4-fluoro-1H-pyrrolo[2,3-b]pyridin-5-yl)oxy]-5-methyl-6-[(2R)-2-(phenylmethoxy)propoxy]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



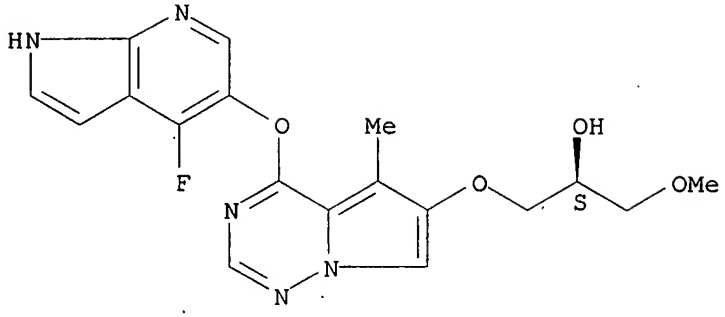
RN 651743-93-0 HCAPLUS
CN 2-Propanol, 1-[[4-[(4-fluoro-1H-pyrrolo[2,3-b]pyridin-5-yl)oxy]-5-methylpyrrolo[2,1-f][1,2,4]triazin-6-yl]oxy]-3-methoxy-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

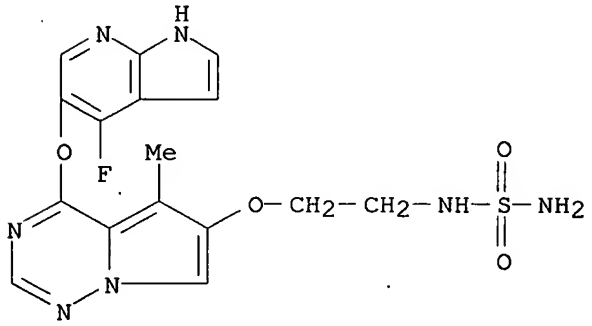


RN 651743-94-1 HCAPLUS
CN 2-Propanol, 1-[[4-[(4-fluoro-1H-pyrrolo[2,3-b]pyridin-5-yl)oxy]-5-methylpyrrolo[2,1-f][1,2,4]triazin-6-yl]oxy]-3-methoxy-, (2S)- (9CI) (CA INDEX NAME)

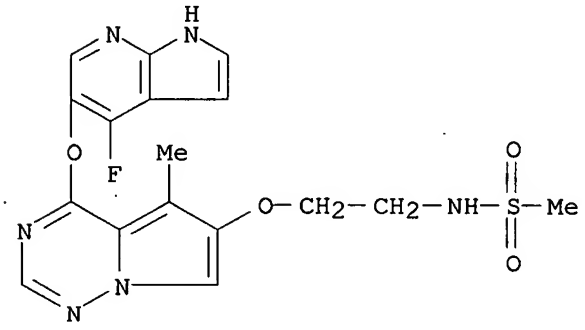
Absolute stereochemistry.



RN 651743-96-3 HCAPLUS
CN Sulfamide, [2-[[4-[(4-fluoro-1H-pyrrolo[2,3-b]pyridin-5-yl)oxy]-5-methylpyrrolo[2,1-f][1,2,4]triazin-6-yl]oxy]ethyl]- (9CI) (CA INDEX NAME)

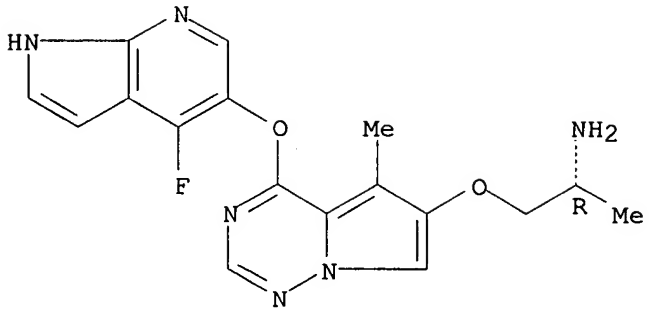


RN 651743-97-4 HCAPLUS
CN Methanesulfonamide, N-[2-[[4-[(4-fluoro-1H-pyrrolo[2,3-b]pyridin-5-yl)oxy]-5-methylpyrrolo[2,1-f][1,2,4]triazin-6-yl]oxy]ethyl]- (9CI) (CA INDEX NAME)

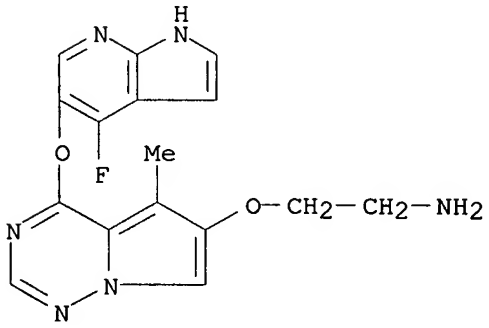


RN 651743-99-6 HCAPLUS
CN 2-Propanamine, 1-[[4-[(4-fluoro-1H-pyrrolo[2,3-b]pyridin-5-yl)oxy]-5-methylpyrrolo[2,1-f][1,2,4]triazin-6-yl]oxy]-, (2R)- (9CI) (CA INDEX NAME)

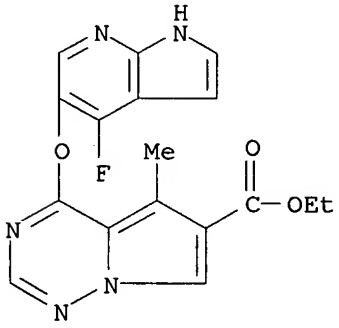
Absolute stereochemistry.



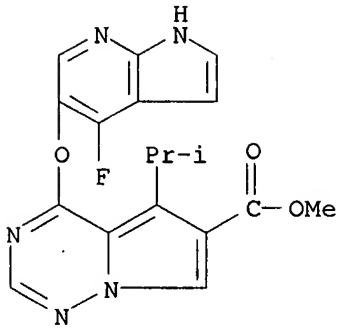
RN 651744-01-3 HCAPLUS
CN Ethanamine, 2-[[4-[(4-fluoro-1H-pyrrolo[2,3-b]pyridin-5-yl)oxy]-5-methylpyrrolo[2,1-f][1,2,4]triazin-6-yl]oxy]- (9CI) (CA INDEX NAME)



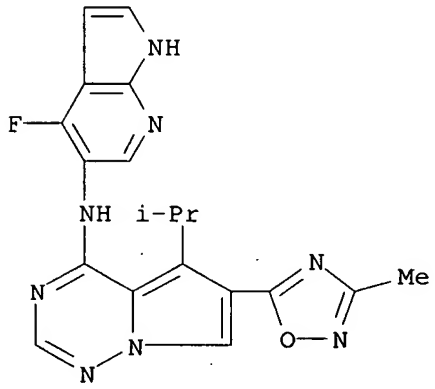
RN 651744-02-4 HCAPLUS
CN Pyrrolo[2,1-f][1,2,4]triazine-6-carboxylic acid, 4-[(4-fluoro-1H-pyrrolo[2,3-b]pyridin-5-yl)oxy]-5-methyl-, ethyl ester (9CI) (CA INDEX NAME)



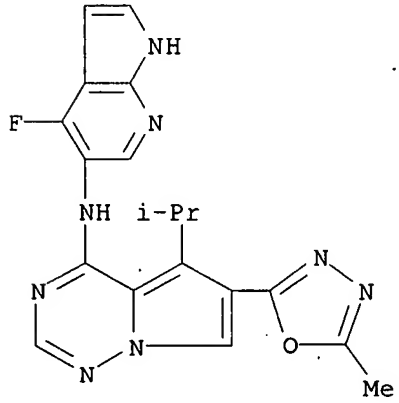
RN 651744-03-5 HCAPLUS
CN Pyrrolo[2,1-f][1,2,4]triazine-6-carboxylic acid, 4-[(4-fluoro-1H-pyrrolo[2,3-b]pyridin-5-yl)oxy]-5-(1-methylethyl)-, methyl ester (9CI) (CA INDEX NAME)



RN 651744-05-7 HCAPLUS
CN Pyrrolo[2,1-f][1,2,4]triazin-4-amine, N-(4-fluoro-1H-pyrrolo[2,3-b]pyridin-5-yl)-5-(1-methylethyl)-6-(3-methyl-1,2,4-oxadiazol-5-yl)- (9CI) (CA INDEX NAME)

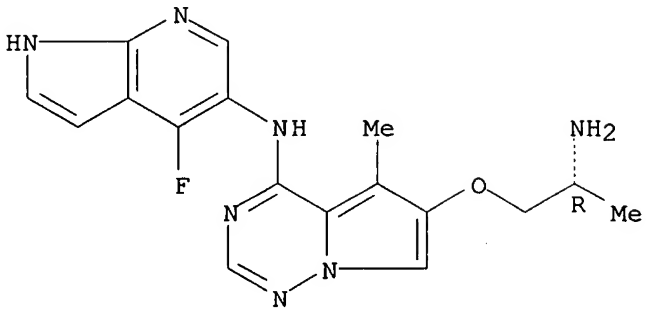


RN 651744-06-8 HCAPLUS
CN Pyrrolo[2,1-f][1,2,4]triazin-4-amine, N-(4-fluoro-1H-pyrrolo[2,3-b]pyridin-5-yl)-5-(1-methylethyl)-6-(5-methyl-1,3,4-oxadiazol-2-yl)- (9CI) (CA INDEX NAME)

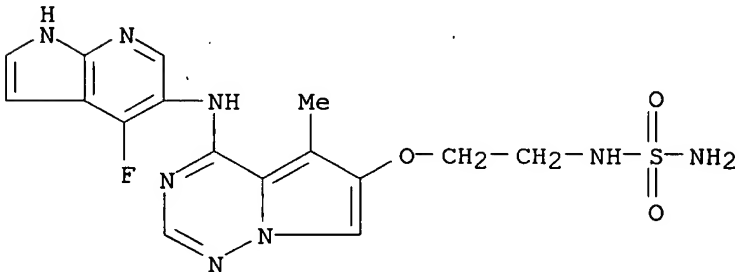


RN 651744-09-1 HCAPLUS
CN Pyrrolo[2,1-f][1,2,4]triazin-4-amine, 6-[(2R)-2-aminopropoxy]-N-(4-fluoro-1H-pyrrolo[2,3-b]pyridin-5-yl)-5-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

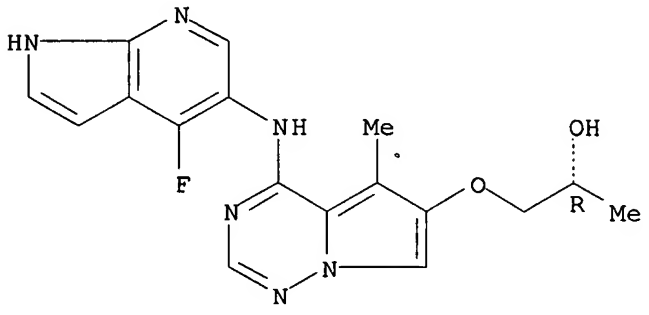


RN 651744-10-4 HCAPLUS
CN Sulfamide, [2-[[4-[(4-fluoro-1H-pyrrolo[2,3-b]pyridin-5-yl)amino]-5-methylpyrrolo[2,1-f][1,2,4]triazin-6-yl]oxy]ethyl]- (9CI) (CA INDEX NAME)

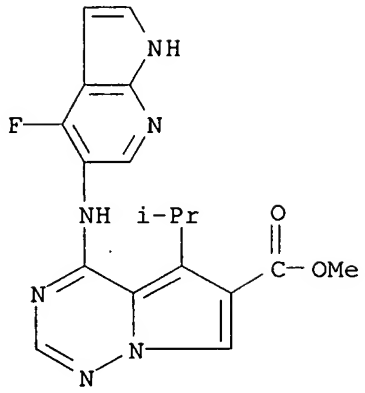


RN 651744-11-5 HCAPLUS
CN 2-Propanol, 1-[[4-[(4-fluoro-1H-pyrrolo[2,3-b]pyridin-5-yl)amino]-5-methylpyrrolo[2,1-f][1,2,4]triazin-6-yl]oxy]-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

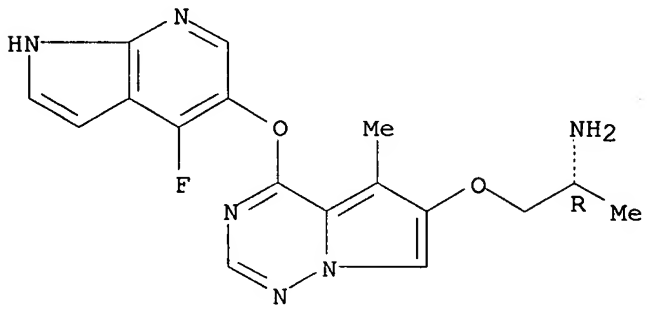


RN 651744-12-6 HCAPLUS
CN Pyrrolo[2,1-f][1,2,4]triazine-6-carboxylic acid, 4-[(4-fluoro-1H-pyrrolo[2,3-b]pyridin-5-yl)amino]-5-(1-methylethyl)-, methyl ester (9CI) (CA INDEX NAME)



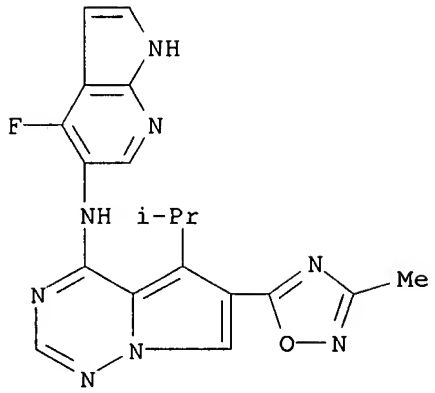
RN 651744-52-4 HCAPLUS
CN 2-Propanamine, 1-[[4-[(4-fluoro-1H-pyrrolo[2,3-b]pyridin-5-yl)oxy]-5-methylpyrrolo[2,1-f][1,2,4]triazin-6-yl]oxy]-, dihydrochloride, (2R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



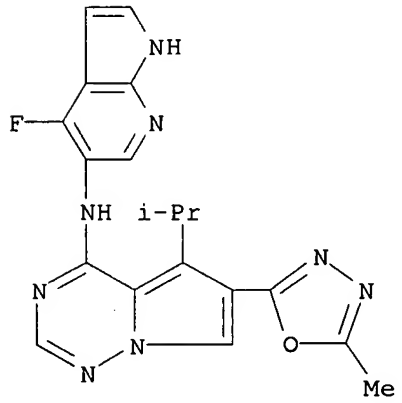
●2 HCl

RN 651744-55-7 HCAPLUS
CN Pyrrolo[2,1-f][1,2,4]triazin-4-amine, N-(4-fluoro-1H-pyrrolo[2,3-b]pyridin-5-yl)-5-(1-methylethyl)-6-(3-methyl-1,2,4-oxadiazol-5-yl)-, monohydrochloride (9CI) (CA INDEX NAME)



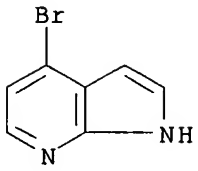
● HCl

RN 651744-56-8 HCAPLUS
CN Pyrrolo[2,1-f][1,2,4]triazin-4-amine, N-(4-fluoro-1H-pyrrolo[2,3-b]pyridin-5-yl)-5-(1-methylethyl)-6-(5-methyl-1,3,4-oxadiazol-2-yl)-, monohydrochloride (9CI) (CA INDEX NAME)

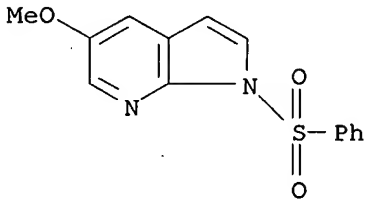


● HCl

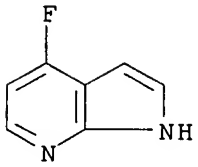
IT 348640-06-2P 397842-89-6P 640735-23-5P
640735-24-6P 640735-25-7P 651744-21-7P
651744-22-8P 651744-26-2P 651744-29-5P
651744-32-0P 651744-35-3P 651744-36-4P
651744-37-5P 651744-41-1P 651744-42-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of pyrrolotriazines as selective VEGFR-2 and FGFR-1 kinase inhibitors for treatment of proliferative diseases)
RN 348640-06-2 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 4-bromo- (CA INDEX NAME)



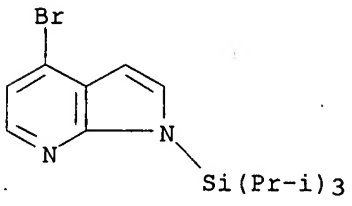
RN 397842-89-6 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 5-methoxy-1-(phenylsulfonyl)- (9CI) (CA INDEX NAME)



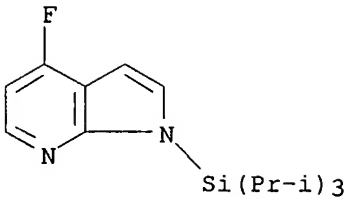
RN 640735-23-5 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 4-fluoro- (9CI) (CA INDEX NAME)



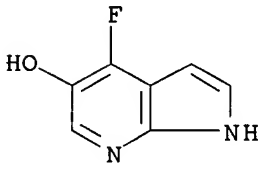
RN 640735-24-6 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 4-bromo-1-[tris(1-methylethyl)silyl]- (CA INDEX NAME)



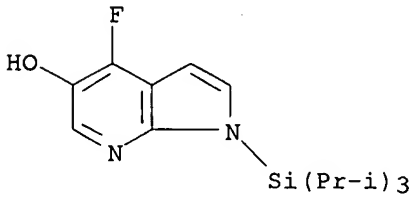
RN 640735-25-7 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 4-fluoro-1-[tris(1-methylethyl)silyl]- (9CI) (CA INDEX NAME)



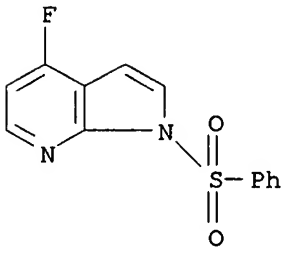
RN 651744-21-7 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridin-5-ol, 4-fluoro- (9CI) (CA INDEX NAME)



RN 651744-22-8 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridin-5-ol, 4-fluoro-1-[tris(1-methylethyl)silyl]-
(9CI) (CA INDEX NAME)

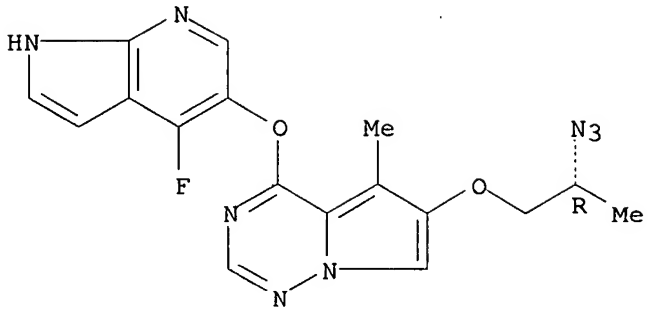


RN 651744-26-2 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 4-fluoro-1-(phenylsulfonyl)- (9CI) (CA INDEX
NAME)

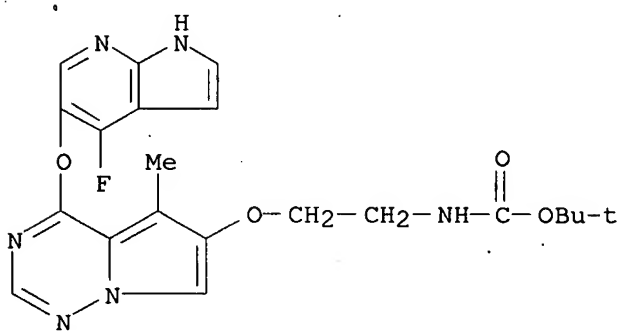


RN 651744-29-5 HCAPLUS
CN Pyrrolo[2,1-f][1,2,4]triazine, 6-[(2R)-2-azidopropoxy]-4-[(4-fluoro-1H-
pyrrolo[2,3-b]pyridin-5-yl)oxy]-5-methyl- (9CI) (CA INDEX NAME)

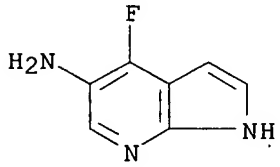
Absolute stereochemistry.



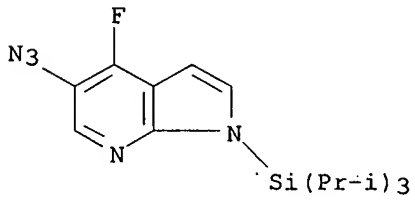
RN 651744-32-0 HCAPLUS
CN Carbamic acid, [2-[[4-[(4-fluoro-1H-pyrrolo[2,3-b]pyridin-5-yl)oxy]-5-methylpyrrolo[2,1-f][1,2,4]triazin-6-yl]oxy]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



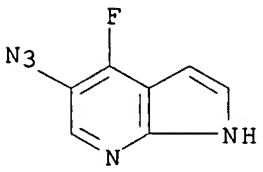
RN 651744-35-3 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridin-5-amine, 4-fluoro- (9CI) (CA INDEX NAME)



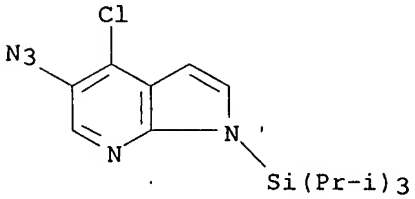
RN 651744-36-4 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 5-azido-4-fluoro-1-[tris(1-methylethyl)silyl]- (9CI) (CA INDEX NAME)



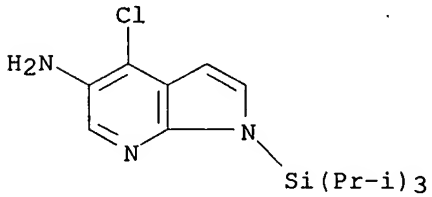
RN 651744-37-5 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 5-azido-4-fluoro- (9CI) (CA INDEX NAME)



RN 651744-41-1 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 5-azido-4-chloro-1-[tris(1-methylethyl)silyl]- (9CI) (CA INDEX NAME)



RN 651744-42-2 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridin-5-amine, 4-chloro-1-[tris(1-methylethyl)silyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 8 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:796491 HCAPLUS
DOCUMENT NUMBER: 139:307795
TITLE: Process for the preparation of antiviral 7-azaindole derivatives
INVENTOR(S): Benoit, Serge; Gingras, Stephane; Soundararajan, Nachimuthu
PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA
SOURCE: PCT Int. Appl., 47 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003082289	A1	20031009	WO 2003-US9055	20030325

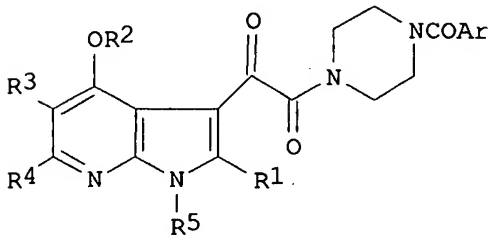
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,

GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT,
TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2004044025	A1	20040304	US 2003-395320	20030324
US 6884889	B2	20050426		
AU 2003224760	A1	20031013	AU 2003-224760	20030325
EP 1487450	A1	20041222	EP 2003-721447	20030325
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
US 2005059695	A1	20050317	US 2004-948405	20040923
US 7105677	B2	20060912		

PRIORITY APPLN. INFO.:	US 2002-367401P	P 20020325
	US 2003-395320	A3 20030324
	WO 2003-US9055	W 20030325

OTHER SOURCE(S): CASREACT 139:307795; MARPAT 139:307795
GI



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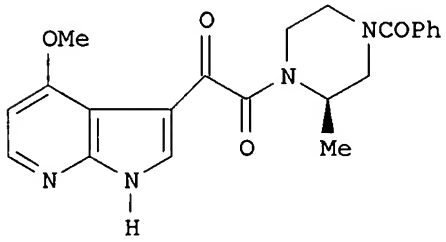


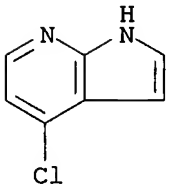
II

AB A process for the manufacture of azaindoles I [R1, R3, R4 = H, alkyl, alkenyl, cycloalkenyl, alkynyl, halogen, CN, Ph, acyl, (un)substituted CONH2, OH, SH, NH2; R2 = Me, Et, CH2CF3, Pr; R5 = H, alkyl, cycloalkyl, cyclolakenyl, CH2Ph, alkenyl, alkynyl, (un)substituted CONH2; Ar = (un)substituted Ph, pyridyl, furyl, thienyl; the piperazine ring may be further substituted] is described. The products are useful as therapeutic agents for the treatment of HIV and AIDS. Thus, 1H-pyrrolo[2,3-b]pyridine was oxidized with 3-ClC6H4CO2OH to its 7-oxide which was chlorinated with MeSO2Cl in MeCN to give 4-chloro-1H-pyrrolo[2,3-b]pyridine. This compound was converted to the 4-methoxy derivative by treatment with KOMe in PhMe and treated with ClCOCO2Me in presence of AlCl3 to give Me (4-methoxy-7-azaindol-3-yl)oxoacetate which was hydrolyzed to the acid and

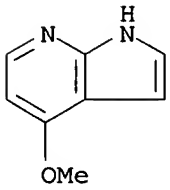
amidated with vilsmeier reagent and (R)-3-methyl-1-benzoylpiperazine to give the azaindole II.

IT 55052-28-3P 122379-63-9P
RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(process for the preparation of antiviral 7-azaindole derivs.)

RN 55052-28-3 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 4-chloro- (CA INDEX NAME)



RN 122379-63-9 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 4-methoxy- (CA INDEX NAME)



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 9 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:610442 HCAPLUS
DOCUMENT NUMBER: 139:164806
TITLE: Preparation of quinazolines as VEGF receptor inhibitors
INVENTOR(S): Hennequin, Laurent Francois Andre
PATENT ASSIGNEE(S): AstraZeneca AB, Swed.; Astrazeneca UK Limited
SOURCE: PCT Int. Appl., 195 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003064413	A1	20030807	WO 2003-GB343	20030128

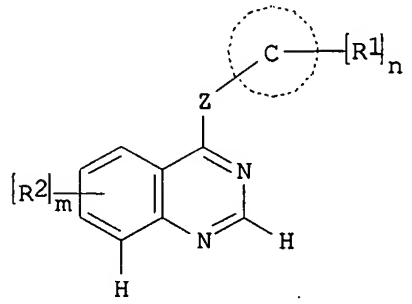
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF,

	BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG					
	CA 2473572	A1	20030807	CA 2003-2473572		20030128
	EP 1474420	A1	20041110	EP 2003-700951		20030128
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK					
	BR 2003007151	A	20041207	BR 2003-7151		20030128
→	US 2005085465	A1	20050421	US 2003-502538		20030128
	HU 200402588	A2	20050530	HU 2004-2588		20030128
	CN 1625555	A	20050608	CN 2003-803124		20030128
	JP 2005522428	T	20050728	JP 2003-564036		20030128
	IN 2004DN02016	A	20050401	IN 2004-DN2016		20040714
	NO 2004003162	A	20040722	NO 2004-3162		20040722
	ZA 2004005908	A	20050926	ZA 2004-5908		20040723
PRIORITY APPLN. INFO.:				EP 2002-290242	A	20020201
				WO 2003-GB343	W	20030128

PG Pub

OTHER SOURCE(S): CASREACT 139:164806; MARPAT 139:164806

GI



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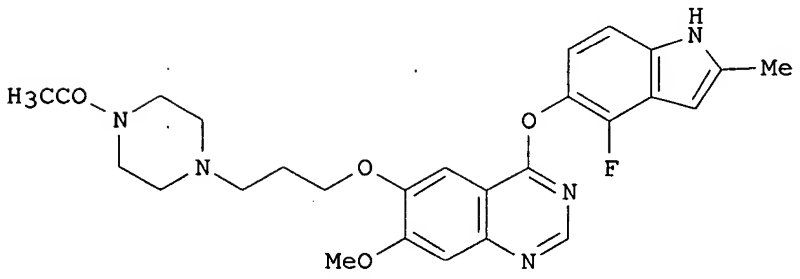


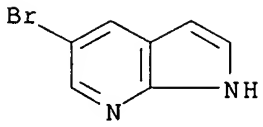
II

AB The title compds. [I; ring C = indolyl, indazolyl or azaindolyl; Z = O, NH, S; n = 0-5; m = 0-3; R2 = H, OH, halo, etc.; R1 = H, halo, oxo, OH, etc.], useful in the manufacture of a medicament for use in the production of an antiangiogenic and/or vascular permeability reducing effect in warm-blooded animals, were prepared and formulated. E.g., a multi-step synthesis of II, was given. The compds. I inhibit the effects of VEGF, a property of value in the treatment of a number of disease states including cancer and rheumatoid arthritis (no biol. data).

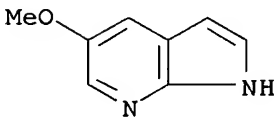
IT 183208-35-7P, 5-Bromo-7-azaindole 183208-36-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of quinazolines as VEGF inhibitors)

RN 183208-35-7 HCAPLUS

CN 1H-Pyrrolo[2,3-b]pyridine, 5-bromo- (CA INDEX NAME)



RN 183208-36-8 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 5-methoxy- (CA INDEX NAME)



REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

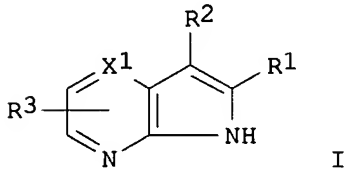
L8 ANSWER 10 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:5957 HCAPLUS
DOCUMENT NUMBER: 138:55984
TITLE: Preparation of azaindoles as protein kinase inhibitors
INVENTOR(S): Cox, Paul Joseph; Majid, Tahir Nadeem; Lai, Justine Yeun Quai; Morley, Andrew; Amendola, Shelley; Deprets, Stephanie Daniele; Edlin, Chris; Gardner, Charles J.; Kominos, Dorothea; Pedgrift, Brian Leslie; Halley, Frank; Gillespy, Timothy Alan; Edwards, Michael; Clerc, Francois Frederic; Nemecek, Conception; Houille, Olivier; Damour, Dominique; Bouchard, Herve; Bezard, Daniel; Carrez, Chantal
PATENT ASSIGNEE(S): Aventis Pharma Limited, UK
SOURCE: PCT Int. Appl., 373 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003000688	A1	20030103	WO 2002-GB2799	20020620
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2451678	A1	20030103	CA 2002-2451678	20020620
EP 1397360	A1	20040317	EP 2002-730531	20020620
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
EE 200400015	A	20040415	EE 2004-15	20020620
BR 2002010507	A	20040615	BR 2002-10507	20020620
SI 21462	A	20041031	SI 2002-20015	20020620
JP 2004534826	T	20041118	JP 2003-507091	20020620

HU 200400247	A2	20050128	HU 2004-247		20020620
CN 1665809	A	20050907	CN 2002-812476		20020620
NZ 529205	A	20060428	NZ 2002-529205		20020620
US 2004053931	A1	20040318	US 2002-177804		20020621
US 6897207	B2	20050524			
ZA 2003009648	A	20050311	ZA 2003-9648		20031211
BG 108481	A	20050531	BG 2003-108481		20031219
US 2005267304	A1	20051201	US 2004-995103		20041123
PRIORITY APPLN. INFO.:			GB 2001-15109	A	20010621
			US 2001-300257P	P	20010622
			WO 2002-GB2799	W	20020620
			US 2002-177804	A1	20020621

OTHER SOURCE(S): MARPAT 138:55984

GI



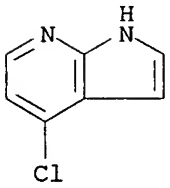
I

AB The invention is directed to physiol. active azaindoles (shown as I; variables defined below; e.g. 6-(5-methoxy-1-methyl-1H-indol-3-yl)-5H-pyrrolo[2,3-b]pyrazine) and compns. containing such compds.; and their prodrugs, and pharmaceutically acceptable salts and solvates of such compds. and their prodrugs. Such compds. and compns. have valuable pharmaceutical properties, in particular the ability to inhibit kinases, especially Syk, FAK, KDR, Aurora2 and IGF1R (data given in general rather than for specific I). Although the methods of preparation are not claimed, >100 example prepns. of intermediates and I are included. For I: R1 = aryl or heteroaryl each optionally substituted by ≥1 groups = alkylenedioxy, alkenyl, alkenyloxy, alkynyl, aryl, cyano, halo, hydroxy, heteroaryl, heterocycloalkyl, nitro, R4, -C(O)R, -C(O)OR5, -C(O)NY1Y2, -NY1Y2, -N(R6)C(O)R7, -N(R6)C(O)NY3Y4, -N(R6)C(O)OR7, -N(R6)SO2R7, -N(R6)SO2NY3Y4, -SO2NY1Y2 and -Z2R. R2 = H, acyl, cyano, halo, lower alkenyl, -Z2R4, -SO2NY3Y4, -NY1Y2 or lower alkyl optionally substituted by aryl, cyano, heteroaryl, heterocycloalkyl, hydroxy, -Z2R4, -C(O)NY1Y2, -C(O)R, -CO2R8, -NY3Y4, -N(R6)C(O)R, -N(R6)C(O)NY1Y2, -N(R6)C(O)OR7, -N(R6)SO2R7, -N(R6)SO2NY3Y4, -SO2NY1Y2 and ≥1 halogen atoms. R3 = H, aryl, cyano, halo, heteroaryl, lower alkyl, -Z2R4, -C(O)OR5 or -C(O)NY3Y4. R4 = alkyl, cycloalkyl, cycloalkylalkyl, heterocycloalkyl or heterocycloalkylalkyl each optionally substituted by aryl, cycloalkyl, cyano, halo, heteroaryl, heterocycloalkyl, -CHO (or a 5- 6- or 7-membered cyclic acetal derivative thereof), -C(O)NY1Y2, -C(O)OR5, -NY1Y2, -N(R6)C(O)R7, -N(R6)C(O)NY3Y4, -N(R6)SO2R7, -N(R6)SO2NY3Y4, -Z3R7 and ≥1 hydroxy, alkoxy and carboxy. R5 = H, alkyl, alkenyl, aryl, arylalkyl, heteroaryl or heteroarylalkyl. R6 = H or lower alkyl; R7 = alkyl, aryl, arylalkyl, cycloalkyl, cycloalkylalkyl, heteroaryl, heteroarylalkyl, heterocycloalkyl or heterocycloalkylalkyl; R8 = H or lower alkyl. R = aryl or heteroaryl; alkenyl; or alkyl, cycloalkyl, cycloalkylalkyl, heterocycloalkyl or heterocycloalkylalkyl each optionally substituted by aryl, cycloalkyl, cyano, halo, heteroaryl, heterocycloalkyl, -CHO (or a 5- 6- or 7-membered cyclic acetal derivative thereof), -C(O)NY1Y2, -C(O)OR5, -NY1Y2, -N(R6)C(O)R7, -N(R6)C(O)NY3Y4, -N(R6)SO2R7, -N(R6)SO2NY3Y4, -Z3R7 and ≥1 hydroxy, alkoxy and carboxy. X1 = N, CH, C-aryl, C-heteroaryl, C-heterocycloalkyl, C-heterocycloalkenyl, C-halo, C-CN, C-R4, CNY1Y2, COH, CZ2R, CC(O)R, CC(O)OR5, CC(O)NY1Y2, CN(R8)C(O)R, CN(R6)C(O)OR7, CN(R6)C(O)NY3Y4,

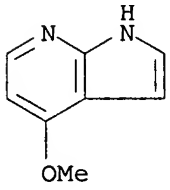
CN(R6)SO2NY3Y4, CN(R6)SO2R, CSO2NY3Y4, C-NO2, or C-alkenyl or C-alkynyl optionally substituted by ≥1 aryl, cyano, halo, hydroxy, heteroaryl, heterocycloalkyl, nitro, -C(O)NY1Y2, -C(O)OR5, -NNY1Y2, -N(R6)C(O)R7, -N(R6)C(O)NY3Y4, -N(R6)C(O)OR7, -N(R6)SO2R7, -N(R6)SO2NY3Y4, -SO2NY1Y2 and -Z2R4. Y1 and Y2 = H, alkenyl, aryl, cycloalkyl, heteroaryl or alkyl optionally substituted by ≥1 aryl, halo, heteroaryl, heterocycloalkyl, hydroxy, -C(O)NY3Y4, -C(O)OR5, NY3Y4, -N(R6)C(O)R7, -N(R6)C(O)NY3Y4, -N(R6)SO2R7, -N(R6)SO2NY3Y4 and -OR7, or the group -NY1Y2 may form a cyclic amine. Y3 and Y4 = H, alkenyl, alkyl, aryl, arylalkyl, cycloalkyl, heteroaryl or heteroarylalkyl; or the group -NY3Y4 may form a cyclic amine; Z1 = O or S; Z2 = O or S(O)n; Z3 = O, S(O)n, NR6; n = 0-2.

IT 55052-28-3P, 4-Chloro-1H-pyrrolo[2,3-b]pyridine
122379-63-9P, 4-Methoxy-1H-pyrrolo[2,3-b]pyridine
348640-05-1P, 4-Chloro-1-(toluene-4-sulfonyl)-1H-pyrrolo[2,3-b]pyridine 348640-52-8P, 4-Methoxy-1-(toluene-4-sulfonyl)-1H-pyrrolo[2,3-b]pyridine 479552-71-1P, 5-Bromo-1-(toluene-4-sulfonyl)-1H-pyrrolo[2,3-b]pyridine
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of azaindoles as protein kinase inhibitors with therapeutic uses)

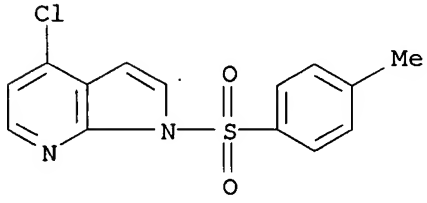
RN 55052-28-3 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 4-chloro- (CA INDEX NAME)



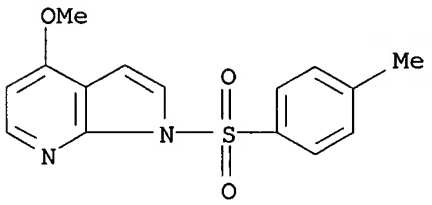
RN 122379-63-9 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 4-methoxy- (CA INDEX NAME)



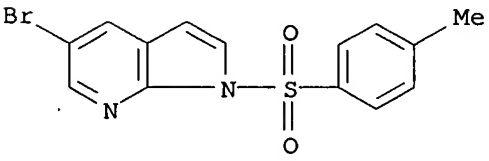
RN 348640-05-1 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 4-chloro-1-[(4-methylphenyl)sulfonyl]- (9CI) (CA INDEX NAME)



RN 348640-52-8 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 4-methoxy-1-[(4-methylphenyl)sulfonyl]- (9CI) (CA INDEX NAME)



RN 479552-71-1 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 5-bromo-1-[(4-methylphenyl)sulfonyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 11 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:489395 HCAPLUS
DOCUMENT NUMBER: 135:92651
TITLE: Preparation of azaindoles as protein kinase inhibitors
INVENTOR(S): Cox, Paul Joseph; Majid, Tahir Nadeem; Lai, Justine Yeun Quai; Morley, Andrew David; Amendola, Shelley; Deprets, Stephanie; Edlin, Chris
PATENT ASSIGNEE(S): Aventis Pharma Ltd., UK
SOURCE: PCT Int. Appl., 270 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001047922	A2	20010705	WO 2000-GB4993	20001227
WO 2001047922	A3	20020117		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2395593	A1	20010705	CA 2000-2395593	20001227
EP 1263759	A2	20021211	EP 2000-985695	20001227
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				

IE, SI, LT, LV, FI, RO, MK, CY, AL, TR					
BR 2000017038	A	20030107	BR 2000-17038		20001227
HU 200203895	A2	20030228	HU 2002-3895		20001227
EE 200200343	A	20030616	EE 2002-343		20001227
JP 2003519144	T	20030617	JP 2001-549392		20001227
NZ 519121	A	20040528	NZ 2000-519121		20001227
AU 777717	B2	20041028	AU 2001-22094		20001227
CN 1615873	A	20050518	CN 2004-10078969		20001227
ZA 2002004126	A	20030825	ZA 2002-4126		20020523
BG 106836	A	20030430	BG 2002-106836		20020618
NO 2002003032	A	20020621	NO 2002-3032		20020621
US 2004009983	A1	20040115	US 2002-178667		20020624
US 6770643	B2	20040803			
US 2004198737	A1	20041007	US 2004-827978		20040420
NO 2006006017	A	20020621	NO 2006-6017		20061227
PRIORITY APPLN. INFO.:			GB 1999-30698	A	19991224
			US 2000-215818P	P	20000705
			WO 2000-GB4993	W	20001227
			US 2002-178667	A3	20020624

OTHER SOURCE(S): MARPAT 135:92651

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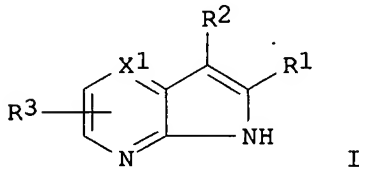


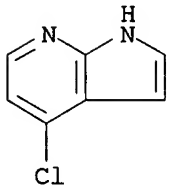
I

AB The invention is directed to compns. containing physiol. active compds. of general formula [I; wherein R1 is (un)substituted aryl or heteroaryl; R2 represents hydrogen, acyl, cyano, halo, lower alkenyl or lower alkyl optionally substituted by a substituent selected from cyano, heteroaryl, heterocycloalkyl, -Z1R8, -CONY3Y4,-CO2R8,-NY3Y4, -N(R6)COR7, -N(R6)CONY3Y4, -N(R6)CO2R7, -N(R6)SO2R7, -N(R6)SO2NY3Y4 and one or more halogen atoms; R3 represents hydrogen, aryl, cyano, halo, heteroaryl, lower alkyl, -CO2R5 or -CONY3Y4; and X1 represents N, CH, C-halo, C-CN, C-R7, C-NY3Y4, C-OH, C-Z2R7, C-CO2R5, C-CONY3Y4, C-N(R8)COR7, C-SO2NY3Y4, C-N(R8)SO2R7, C-alkenyl, C-alkynyl or C-NO2; wherein R5 represents hydrogen, alkyl, alkenyl, aryl, arylalkyl, heteroaryl or heteroarylalkyl; R6 represents hydrogen or lower alkyl; R7 represents alkyl, aryl, arylalkyl, cycloalkyl, cycloalkylalkyl, heteroaryl, heteroarylalkyl, heterocycloalkyl or heterocycloalkylalkyl; R8 represents hydrogen or lower alkyl; represents; Y3 and Y4 are independently hydrogen, alkenyl, alkyl, aryl, arylalkyl, cycloalkyl, heteroaryl or heteroarylalkyl; or the group -NY3Y4 may form a cyclic amine; Z1 represents O or S; Z2 represents O or S(O)n; n is zero or an integer 1 or 2] and their prodrugs, and pharmaceutically acceptable salts and solvates of such compds. and their prodrugs. These compds. have valuable pharmaceutical properties, in particular the ability to inhibit protein kinases, especially Syk kinase, and are useful for the treatment of asthma, psoriasis, joint inflammation, and inflammatory bowel disease. Thus, a stirred solution of diisopropylamine (59.9 mL) in THF (1,400 mL), at -15 °C and under nitrogen, was treated with a solution of n-butyllithium in hexanes (131 mL, 1.6 M) over 25 min at <-10°. After stirring for 30 min the mixture was treated with methylpyrazine (26.8 g) over 15 min, then stirred for 1 h and then treated with a solution of 5-methoxy-1-methyl-1H-indole-3-carbonitrile (53 g) in THF (600 mL) over 1 h at <-10°, and the reaction mixture was allowed to

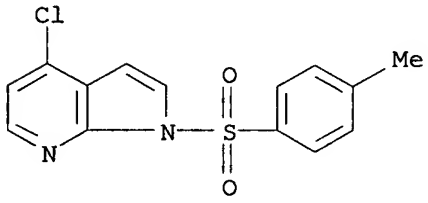
warm to room temperature over 2 h and then stood overnight to give, after workup
and flash chromatog., 6-(5-Methoxy-1-methyl-1H-indol-3-yl)-5H-pyrrolo[2,3-b]pyrazine (19.4 g) as a gray solid. I showed IC50 of 10-100 nM against Syk kinase.

IT 55052-28-3P 348640-05-1P 348640-07-3P
348640-52-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation of azaindoles as protein kinase inhibitors)

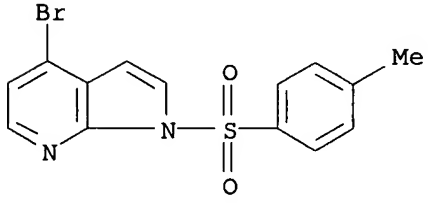
RN 55052-28-3 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 4-chloro- (CA INDEX NAME)



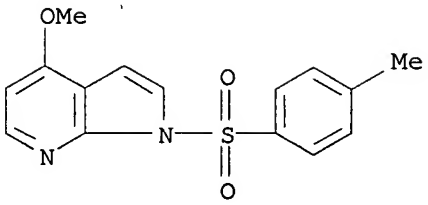
RN 348640-05-1 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 4-chloro-1-[(4-methylphenyl)sulfonyl]- (9CI) (CA INDEX NAME)



RN 348640-07-3 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 4-bromo-1-[(4-methylphenyl)sulfonyl]- (CA INDEX NAME)



RN 348640-52-8 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 4-methoxy-1-[(4-methylphenyl)sulfonyl]- (9CI) (CA INDEX NAME)



L8 ANSWER 12 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:279453 HCAPLUS
DOCUMENT NUMBER: 134:295809
TITLE: Preparation of polycyclic azaindole derivatives and their affinity for melatonin receptors
INVENTOR(S): Guillaumet, Gerald; Viaud, Marie-Claude; Van De Poel, Herve; Delagrange, Philippe; Bennejean, Caroline; Renard, Pierre
PATENT ASSIGNEE(S): Adir Et Compagnie, Fr.
SOURCE: Eur. Pat. Appl., 41 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1092717	A2	20010418	EP 2000-402832	20001013
EP 1092717	A3	20011004		
EP 1092717	B1	20030108		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
FR 2799757	A1	20010420	FR 1999-12900	19991015
FR 2799757	B1	20011214		
US 6495543	B1	20021217	US 2000-689578	20001012
CA 2323720	A1	20010415	CA 2000-2323720	20001013
CA 2323720	C	20050215		
JP 2001114781	A	20010424	JP 2000-314109	20001013
JP 3519357	B2	20040412		
CN 1293195	A	20010502	CN 2000-130473	20001013
ZA 2000005667	A	20010515	ZA 2000-5667	20001013
BR 2000004823	A	20010522	BR 2000-4823	20001013
HU 200004007	A2	20010528	HU 2000-4007	20001013
AT 230745	T	20030115	AT 2000-402832	20001013
PT 1092717	T	20030430	PT 2000-402832	20001013
ES 2189730	T3	20030716	ES 2000-402832	20001013
AU 772126	B2	20040408	AU 2000-66502	20001013
NO 2000005200	A	20010417	NO 2000-5200	20001016
NO 317884	B1	20041227		
HK 1036061	A1	20041119	HK 2001-106736	20010925
US 2003105087	A1	20030605	US 2002-267303	20021009
US 2003134847	A1	20030717	US 2002-267238	20021009
US 6667304	B2	20031223		

PRIORITY APPLN. INFO.: FR 1999-12900 A 19991015
US 2000-689578 A3 20001012

OTHER SOURCE(S): MARPAT 134:295809
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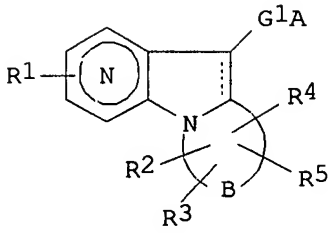
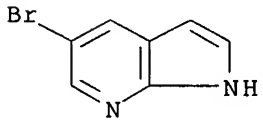


I

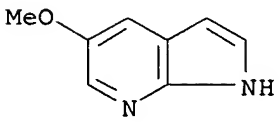
AB The title compds. I [the N atom in the ring may be in any position in the ring; R1 = NRCR'(Z), halo, R, S(O)nR, etc.; A = C(Z)NRR', NRC(Z)R', etc.; B forms with an atom of N and an atom of C a ring; R2, R3 = H, alkyl, alkoxy, OH, R2R3 = oxo; R4, R5 = H, or form with two adjacent atoms in ring B an aryl or heteroaryl group; G1 = alkylene] were prepared The affinity of I for melatonin receptors was determined E.g., [2-(2-methoxy-6H-pyrido[2',3':4,5]pyrrolo[2,1-a]isoindol-11-yl)ethyl]acetamide was prepared

IT 183208-35-7P 183208-36-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of polycyclic azaindole derivs. and their affinity for melatonin receptors)

RN 183208-35-7 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 5-bromo- (CA INDEX NAME)



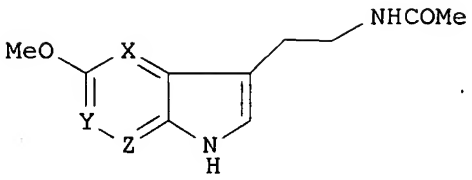
RN 183208-36-8 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 5-methoxy- (CA INDEX NAME)



L8 ANSWER 13 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:	1999:241415 HCAPLUS
DOCUMENT NUMBER:	131:44684
TITLE:	Synthesis of new melatoninergic ligands including azaindole moiety
AUTHOR(S):	Mazeas, Daniel; Guillaumet, Gerald; Viaud, Marie-Claude
CORPORATE SOURCE:	Institut de Chimie Organique et Analytique, associe au CNRS, Universite d'Orleans, Orleans, 45067, Fr.
SOURCE:	Heterocycles (1999), 50(2), 1065-1080 CODEN: HTCYAM; ISSN: 0385-5414
PUBLISHER:	Japan Institute of Heterocyclic Chemistry
DOCUMENT TYPE:	Journal
LANGUAGE:	English

OTHER SOURCE(S): CASREACT 131:44684
GI

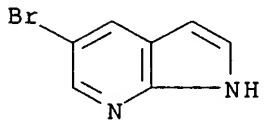


I

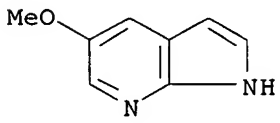
AB A novel series of melatonin analogs I (Z = N, X = Y = CH; Y = N, X = Z = CH; X = N, Z = Y = CH) based on the azaindole nucleus is described. These compds. are prepared in several steps directly from the com. available 7-azaindole or from substituted amino-, iodo- or/and nitropyridines using a catalyzed palladium reaction or vicarious nucleophilic substitution of hydrogen (VNS) in order to elaborate the 6-, 5- and 4-azaindole derivs. resp.

IT 183208-35-7P 183208-36-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis of new melatoninergic ligands including azaindole moiety)

RN 183208-35-7 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 5-bromo- (CA INDEX NAME)



RN 183208-36-8 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 5-methoxy- (CA INDEX NAME)



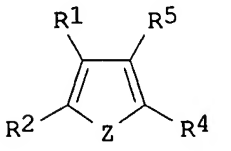
REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 14 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1996:685279 HCAPLUS
DOCUMENT NUMBER: 125:328699
TITLE: Preparation of N-(pyrrolopyridylalkyl)alkanamides and analogs as melatonin receptor ligands
INVENTOR(S): Viaud, Marie-Claude; Guillaumet, Gerald; Mazeas, Daniel; Vandepoel, Herve; Renard, Pierre; Pfeiffer, Bruno; Delagrange, Philippe
PATENT ASSIGNEE(S): Adir Et Compagnie, Fr.
SOURCE: Eur. Pat. Appl., 61 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent

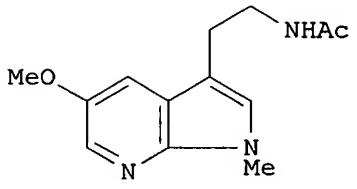
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 737685	A1	19961016	EP 1996-400778	19960411
EP 737685	B1	20000719		
R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
FR 2732969	A1	19961018	FR 1995-4504	19950414
FR 2732969	B1	19970516		
AT 194839	T	20000815	AT 1996-400778	19960411
PT 737685	T	20001031	PT 1996-400778	19960411
ES 2150642	T3	20001201	ES 1996-400778	19960411
CA 2174033	A1	19961015	CA 1996-2174033	19960412
CA 2174033	C	20010724		
NO 9601457	A	19961015	NO 1996-1457	19960412
ZA 9602934	A	19961017	ZA 1996-2934	19960412
AU 9650629	A	19961024	AU 1996-50629	19960412
AU 700071	B2	19981217		
CN 1139111	A	19970101	CN 1996-104624	19960412
CN 1058967	B	20001129		
US 5714495	A	19980203	US 1996-631234	19960412
JP 08291172	A	19961105	JP 1996-92428	19960415
JP 3723274	B2	20051207		
GR 3034620	T3	20010131	GR 2000-402305	20001013

PRIORITY APPLN. INFO.: FR 1995-4504 A 19950414
OTHER SOURCE(S): CASREACT 125:328699; MARPAT 125:328699
GI



I

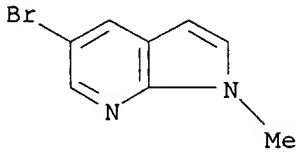


II

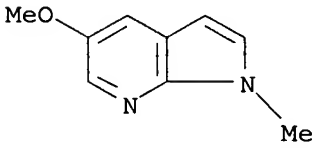
AB Title compds. [I; R1R2 = (un)substituted CH:CHCH:N, -CH:CHN:CH, -CH:NCH:CH, -N:CHCH:CH; R4 = H, halo, OH, alkoxyalkyl, etc.; R5 = Z1Z2R; R = H, (cyclo)alkyl, alkenyl, etc.; Z = O, S, (alkyl)imino, etc.; Z1 = alkylene; Z2 = NR6C(:X), NR6C(:X)NH, C(:X)NR6; R6 = H, alkyl, aryl(alkyl), etc.; X = O or S] were prepared as melatonin receptor ligands (no data). Thus, pyrrolo[2,3-b]pyridine was converted in 11 steps to title compound II.

IT 183208-22-2P 183208-23-3P 183208-35-7P
183208-36-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of N-(pyrrolopyridylalkyl)alkanamides and analogs as melatonin receptor ligands)

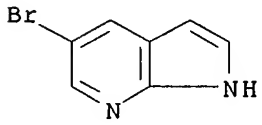
RN 183208-22-2 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 5-bromo-1-methyl- (9CI) (CA INDEX NAME)



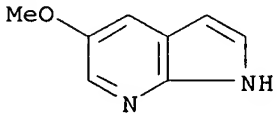
RN 183208-23-3 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 5-methoxy-1-methyl- (9CI) (CA INDEX NAME)



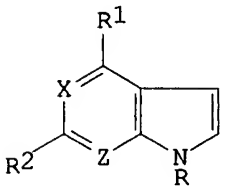
RN 183208-35-7 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 5-bromo- (CA INDEX NAME)



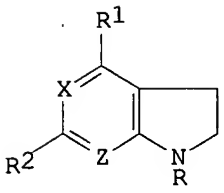
RN 183208-36-8 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 5-methoxy- (CA INDEX NAME)



L8 ANSWER 15 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1979:405132 HCAPLUS
DOCUMENT NUMBER: 91:5132
TITLE: Azaindole derivatives. 57. Dehydrogenation of substituted 5- and 7-azaindolines activated by manganese dioxide
AUTHOR(S): Azimov, V. A.; Krasnokutskaya, D. M.; Palant, I. N.; Yakhontov, L. N.
CORPORATE SOURCE: Vses. Nauchno-Issled. Khim.-Farm. Inst., Moscow, USSR
SOURCE: Khimiya Geterotsiklicheskikh Soedinenii (1979), (3), 375-8
CODEN: KGSSAQ; ISSN: 0453-8234
DOCUMENT TYPE: Journal
LANGUAGE: Russian
OTHER SOURCE(S): CASREACT 91:5132
GI



I



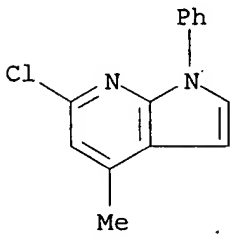
II

AB Azaindoles I (X = CH, N; Z = N, CH, CCN; R = Ph, H, Ac, PhCH2; R1 = Me, H, R2 = Cl, OH, H, Et2NCH2CH2O) were prepared by dehydrogenation of the corresponding II with activated MnO2. Oxidation-reduction potentials were determined

IT 5912-17-4P 70357-62-9P 70357-63-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

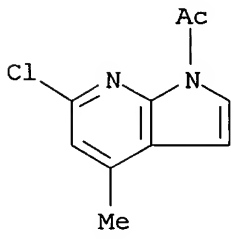
RN 5912-17-4 HCAPLUS

CN 1H-Pyrrolo[2,3-b]pyridine, 6-chloro-4-methyl-1-phenyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



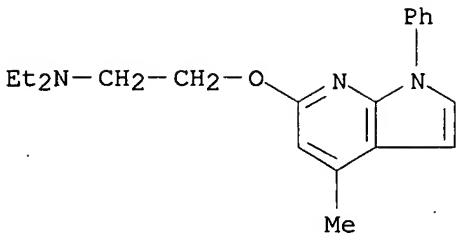
RN 70357-62-9 HCAPLUS

CN 1H-Pyrrolo[2,3-b]pyridine, 1-acetyl-6-chloro-4-methyl- (9CI) (CA INDEX NAME)

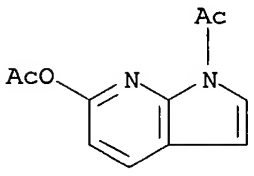


RN 70357-63-0 HCAPLUS

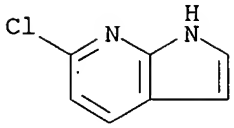
CN Ethanamine, N,N-diethyl-2-[(4-methyl-1-phenyl-1H-pyrrolo[2,3-b]pyridin-6-yl)oxy]- (9CI) (CA INDEX NAME)



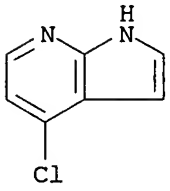
L8 ANSWER 16 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1975:72820 HCAPLUS
DOCUMENT NUMBER: 82:72820
TITLE: Diazaindenes (azaindoles). VI. Preparation and properties of 1,7-diazaindene 7-oxide and 6,7,8,9-tetrahydro-γ-carboline 2-oxide
AUTHOR(S): Clark, Bernard A. J.; Parrick, John
CORPORATE SOURCE: Sch. Chem., Brunel Univ., Uxbridge, UK
SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1974), (19), 2270-4
CODEN: JCPRB4; ISSN: 0300-922X
DOCUMENT TYPE: Journal
LANGUAGE: English
GI For diagram(s), see printed CA Issue.
AB Oxidation of N-acetyl-1,7-diazaindene and -6,7,8,9,-tetrahydro-γ-carboline gave oxides I and II, resp., which with Ac2O gave ketones III and IV, resp., after hydrolysis. I and II with POCl3 followed by alkaline hydrolysis gave chloro compds. V and VI, resp. II with AgCN-BzCl and PhNCO in DMF gave carbonitrile VII and carboline VIII, resp.
IT 55052-25-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and hydrolysis of)
RN 55052-25-0 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridin-6-ol, 1-acetyl-, acetate (ester) (9CI) (CA INDEX NAME)



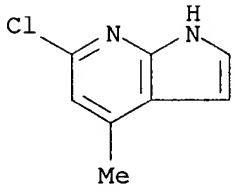
IT 55052-27-2P 55052-28-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 55052-27-2 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 6-chloro- (9CI) (CA INDEX NAME)



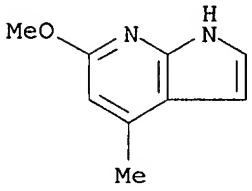
RN 55052-28-3 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 4-chloro- (CA INDEX NAME)



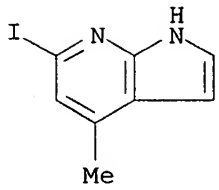
L8 ANSWER 17 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1964:496273 HCAPLUS
DOCUMENT NUMBER: 61:96273
ORIGINAL REFERENCE NO.: 61:5621g-h
TITLE: Derivatives of 7-azaindole. VII. Dehydrogenation of indole derivatives and 7-azaindoline derivatives with sodium in liquid ammonia
AUTHOR(S): Yakhontov, L. N.; Uritskaya, M. Ya.; Rubtsov, M. V.
SOURCE: Zh. Obshch. Khim. (1964), 34(5), 1456-8
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB 6-Chloro-4-methyl-7-azaindoline stirred 2 h. with Na in liquid NH3-MePh, then refluxed 8 h. after evaporation of NH3 gave, after treatment with MeOH and aqueous K2CO3, 76.5% 4-methyl-7-azaindole, m. 125-6°. 6-Methoxyindole was hydrogenated over Raney Ni at 80° and 80 atmospheric to 72.5% 6-methoxyindoline, b14 135-7°, n2D0 1.5860. This and Na-NH3, as above gave 78.3% 6-methoxyindole. Similarly, the corresponding indolines were reduced to 4-methyl-7-azaindole (I) and 4-methyl-6-methoxy-7-azaindole; I was also formed by similar treatment of 1-benzyl-4-methyl-7azaindoline or 1-acetyl-4-methyl-7-azaindoline. The reaction failed with 1-acetyl- and 1-butyl-4-methyl-7-azaindolines. Indoline gave indole, while 1-acetylindole also gave indole.
IT 4894-29-5P, 1H-Pyrrolo[2,3-b]pyridine, 6-chloro-4-methyl-
16462-91-2P, 1H-Pyrrolo[2,3-b]pyridine, 6-methoxy-4-methyl-
90321-93-0P, 1H-Pyrrolo[2,3-b]pyridine, 6-iodo-4-methyl-
RL: PREP (Preparation)
(preparation of)
RN 4894-29-5 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 6-chloro-4-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



RN 16462-91-2 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 6-methoxy-4-methyl- (7CI, 8CI) (CA INDEX NAME)



RN 90321-93-0 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 6-iodo-4-methyl- (7CI) (CA INDEX NAME)



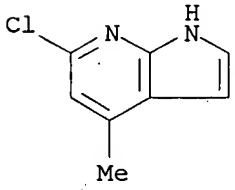
L8 ANSWER 18 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1964:432360 HCAPLUS
DOCUMENT NUMBER: 61:32360
ORIGINAL REFERENCE NO.: 61:5621d-g
TITLE: Derivatives of 7-azaindole. VI. Synthesis of 4-methyl-7azaindole and its 6-chloro, 6-iodo, and 6-methoxy derivatives
AUTHOR(S): Yakhontov, L. N.; Uritskaya, M. Ya.; Rubtsov, M. V.
SOURCE: Zhurnal Obshchei Khimii (1964), 34(5), 1449-55
CODEN: ZOKHA4; ISSN: 0044-460X
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
OTHER SOURCE(S): CASREACT 61:32360
AB cf. CA 61, 3066c. 2,6-Dichloro-3-(2-chloroethyl)-4-methylpyridine heated with alc. NH3 12 h. at 180° gave 53% 6-chloro-4-methyl-7-azaindoline (Ia), b0.4 125-7°, m. 130.5-1.5°; HCl salt decomposed 213.5-15°. Hydrogenation over Pd in aqueous EtOH gave 100% 4-methyl-7azaindoline (I), m. 90-1° (HCl salt decomposed 292°), which with Ac2O gave 98% 1-Ac derivative, m. 108-9°, sublimed at 90°/0.4 mm. I and Na in liquid NH3-MePh 1 h., then treated with PhCH2Cl 3 h. at reflux gave after acidification 76.6% 1-benzyl- 4-methyl-7-azaindoline, b2 172°, n2p0 1.6040; HCl salt m. 193.594°. Similarly, BuBr gave 64% 1-butyl-4-methyl-7-azaindoline, b1.5 91°, 1.5346; HCl salt m. 158-9°; picrate m.

162-3.5°. I and PhCH:CHCO2H refluxed in xylene in the presence of Pd black 5 h. under N gave a little 1-cinnamoyl-4-methyl-7-azaindoline, m. 151.5-52°, and 64.6% unchanged I. Ia refluxed With chloranil in xylene 1.5 h. gave after treatment with 50% KOH 52% 6-chloro-4-methyl-7-azaindole (II), m. 167°, after sublimation at 113-15°/0.4 mm. Hydrogenation over Pd in EtOH gave 4-methyl-7-azaindoline. Ia and MeOK in MeOH after 6 h. at 190° in a sealed tube gave 77% 4-methyl-6-methoxy-7-azaindoline, m. 136°, after sublimation at 85°/0.8 mm. This and chloranil in boiling xylene 1.5 h. gave 58% 4-methyl6-methoxy-7-azaindole, m. 131°, after sublimation at 70°/0.6 mm.; the same product was formed from II by similar reaction. II and Li in liquid NH3 2 h. gave, after removal of residual with steam, 69%, 4-methyl-7-azaindole (III), m. 127.5-28° after sublimation at 100-5°/3 mm. II heated with 48% HI 3.5 h. at 180° in a sealed tube gave 34% yellow 4-methyl-6-iodo-7-azaindole, m. 153° after sublimation at 100°/0.7 mm.

IT 4894-29-5P, 1H-Pyrrolo[2,3-b]pyridine, 6-chloro-4-methyl-
16462-91-2P, 1H-Pyrrolo[2,3-b]pyridine, 6-methoxy-4-methyl-
90321-93-0P, 1H-Pyrrolo[2,3-b]pyridine, 6-iodo-4-methyl-
RL: PREP (Preparation)
(preparation of)

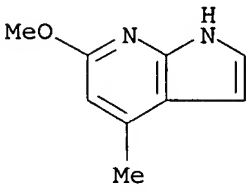
RN 4894-29-5 HCAPLUS

CN 1H-Pyrrolo[2,3-b]pyridine, 6-chloro-4-methyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



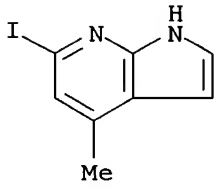
RN 16462-91-2 HCAPLUS

CN 1H-Pyrrolo[2,3-b]pyridine, 6-methoxy-4-methyl- (7CI, 8CI) (CA INDEX NAME)



RN 90321-93-0 HCAPLUS

CN 1H-Pyrrolo[2,3-b]pyridine, 6-iodo-4-methyl- (7CI) (CA INDEX NAME)



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L1                STRUCTURE UPLOADED
L2            328 S L1 FUL
L3                STRUCTURE UPLOADED
L4             59 S L3 FUL

     FILE 'HCAPLUS' ENTERED AT 14:07:22 ON 05 APR 2007
L5             94 S L2/P
L6             24 S L5 AND (OXID?)/AB,BI
L7             32 S L4/P
L8             18 S L7 AND L5

=> log y
```